

City of Steamboat Springs
General Specifications
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**SECTION 01010
SUMMARY OF WORK**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Conditions, Drawings and other Division-1 Specification sections apply to Work of this section.

1.02 DESCRIPTION: **ADD DESCRIPTION**

1.03 GENERAL:

- A. The Work to be done under this Contract is the construction of the Work as shown, documented, and set forth in the Contract Documents, in a workmanlike manner, to the satisfaction of the Owner's Representative.
- B. If these documents make it impossible to produce first class work or to warranty the work or the Contractor's performance, or should discrepancies appear among the Contract Documents, the Contractor must immediately request interpretation, correction or clarification from the Owner's Representative.
- C. The Contractor represents that he fully understands the nature and extent of the Work, all factors and conditions affecting or which may be affected by it and characteristics of its various parts and elements and their fitting together and functioning.

1.04 PROJECT DESCRIPTION: **ADD DESCRIPTION; reference contacts in contract: owner =? Owners rep = ? Engineer = " contractor = ?=**

1.05 CONSTRUCTION STAGING: Unless otherwise provided, construction staging shall be contained within the Limits of Work. Construction staging areas shall be maintained in a safe and workmanlike manner at all times. The Contractor shall not occupy the staging areas with any construction equipment or materials outside of this designated period, the length of the project. Temporary construction staging may be obtained within other areas by the Contractor, at the Contractor's expense. Contractor shall obtain and pay for the use of any additional storage or work areas needed for operations. Contractor is responsible for security in all Contractor occupied staging areas. Camping will not be allowed in the staging areas.

1.06 CONSTRUCTION ACCESS: All construction related equipment, material handling, and deliveries shall access the project site by **ADD DESCRIPTION** Additional information is provided in 01570 Traffic and Pedestrian Control.

1.07 CONSTRUCTION SCHEDULE: Detailed Contractor scheduling requirements are provided in 01310 Progress Schedules. Construction on the Project is limited to the following periods:

- A. No Construction Activity on Project: **ADD DESCRIPTION**
- B. Regular Construction Activity: **ADD DESCRIPTION**

1.08 CONSTRUCTION PHASING: Install improvements in a sequence that does not damage previous work, allows work to be prosecuted in an efficient manner, allows normal operations of businesses, and minimizes impacts from construction. A phasing plan shall be developed by the Contractor and

include: **ADD DESCRIPTION**

- 1.09 **CONTRACT COMPLETION DATE:** It is the intent for the Contractor to complete all of the work specified in the Construction Phasing within the dates as specified in the Construction Schedule.
- 1.10 **WORK TIMES:** Construction activity is restricted to 7 AM to 7 PM, Monday through Friday.
- 1.11 **CONTRACTORS USE OF PREMISES:**
- A. Limit the use of the site to areas within the limit of work line shown on the drawings. Restore (as determined by Owner's Representative) all areas beyond contract limits disturbed during construction to previous conditions or better.
 - B. Contractor assumes full responsibility for the protection and safekeeping of products obtained under this Contract and stored on the site.
 - C. Contractor assumes all responsibility for damage on all property due to construction operations of this Work.
 - D. Operations of the Contractor shall be limited to the area defined by the Construction / Work limits on the drawings.
- 1.12 **EXISTING UTILITIES:**
- A. Protect all existing utilities from damage during construction. The Contractor shall have utility companies field locate facilities prior to beginning construction, and shall immediately notify the Owner's Representative of any utilities encountered which are not indicated on the plans.
 - B. The Contractor shall notify the Owner's Representative immediately if a utility is damaged. The Contractor shall be fully responsible at no additional cost to the Owner, for all repairs including penalties, if any, due to an unplanned disruption of service.
 - C. Reference Plans, Specifications, and Section 01040 – Coordination for other Utility Requirements

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION (Not applicable)

END OF SECTION

SECTION 01015

CONTRACT DOCUMENTS

PART 1-GENERAL

- 1.01 DEFINITIONS: Wherever used in the contract documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- A. ADDENDA – Written or graphic instruments issued prior to the execution of the agreement that modify or interpret the contract documents, drawings and specifications, by additions, deletions, clarifications or corrections.
 - B. BID – The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the work to be performed.
 - C. BIDDER – Any person, firm, or corporation submitting a bid for the work.
 - D. BONDS – Bid, performance, and payment bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the contract documents.
 - E. CHANGE ORDER – A written order to the Contractor authorizing an addition, deletion or revision in the work within the general scope of the contract documents, or authorizing an adjustment in the contract price or contract time.
 - F. CONTRACT DOCUMENTS – The contract, including information for the Contractor, pricing documents, agreement, payment bond, performance bond, notice of award, notice to proceed, change order, drawings, specifications, addenda, Construction Directives, Minutes of Meetings held between the Owner and Contractor, Certificates of Insurance, and Final Receipt and Guarantee. The word Contract is used synonymously with Agreement. The Contract represents the entire and integrated agreement between the Owner and the Contractor and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified by a Change Order.
 - G. CONTRACT PRICE – The total monies payable to the Contractor under the terms and conditions of the contract documents.
 - H. CONTRACT COMPETION DATE – The date stated in the contract documents for the completion of the work and the Contractor demobilized from the work site.
 - I. DRAWINGS – The part of the contract documents which show the characteristics and scope of the work to be performed and which have been prepared or approved by the engineer. The Drawings are the graphic and pictorial portions of the Project Manual showing the design, location and dimensions of the Work and generally include plans, elevations, sections, details, diagrams, schedules, and quantities. The drawings have been prepared or approved by the engineer.
 - J. CITY ENGINEER – The City of Steamboat Springs City Engineer or her designee.
 - K. PROJECT ENGINEER, TESTING ENGINEER - The person, firm or corporation named as such in the contract documents.

- L. FIELD ORDER – A written order effecting a change in the work not involving an adjustment in the contract price or an extension of the contract time, issued by the engineer to the Contractor during construction.
- M. NOTICE OF AWARD – The written notice of the acceptance of the bid from the Owner to the successful bidder.
- N. NOTICE TO PROCEED – Written communication issued by the Owner to the Contractor authorizing him to proceed with the work and establishing the date of commencement of the work.
- O. OWNER – A public or quasi-public body, or authority, corporation, association, partnership or individual for whom the work is to be performed. The Owner is the Steamboat Springs
- P. PRICING – The offer of the Contractor submitted on the prescribed form setting forth the prices for the work to be performed.
- Q. PROJECT – The undertaking to be performed as provided in the contract documents.
- R. PROJECT MANUAL – The Project Manual consists of all documents for this Project prepared by the Owner, including the Advertisement for Bid, Contract Forms, General Conditions, and Drawings and Specifications.
- S. OWNER’S REPRESENTATIVE – The authorized representative of the Owner who is assigned to the project site or any part thereof. An Owner’s Representative shall be designated as the prime contact with the Contractor and the Owner’s Representative will correspond with the appropriate Architect or Engineer and Owner unless the Owner’s Representative is the Project Engineer or Architect. The term Resident Project Representative is the same as Owner’s Representative.
- T. SHOP DRAWINGS – All drawings, diagrams, illustrations, brochures, schedules, and other data prepared by the Contractor or subcontractor, manufacturer, supplier or distributor, which illustrate how specific portions of the work shall be fabricated or installed.
- U. SPECIFICATIONS – A part of the contract documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- V. SUBCONTRACTOR – An individual, firm or corporation having a direct contract with the Contractor or with any other subcontractor for the performance of a part of the work at the site.
- W. SUBSTANTIAL COMPLETION – That date as certified by the engineer when the construction of the project or specified part thereof is sufficiently completed, in accordance with the contract documents, so that the project or specified part can be utilized for the purposes for which it is intended.
- X. SUPPLEMENTAL GENERAL CONDITIONS – Modifications to General Conditions required by a Federal agency for participation in the project and approved by the agency in writing prior to inclusion in the contract documents, or such requirements that may be imposed by applicable state laws.
- Y. SUPPLIER – Any person or organization who supplies materials or equipment for the work, including that fabricated to a special design, but who does not perform labor at the site.

- Z. WORK – All labor necessary to produce the construction required by the contract documents, and all materials and equipment incorporated or to be incorporated in the project.
- AA. WRITTEN NOTICE – Any notice to any part of the agreement relative to any part of the agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the work.
- BB. ADDITIONAL SUPPLEMENTAL GENERAL CONDITION – A part of the contract documents which amends or supplements the General Conditions. A SUPPLEMENTAL GENERAL CONDITION required by other than a Federal Agency.

1.02 GENERAL:

- A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If, during the performance of the Work, Contractor finds a conflict, error or discrepancy in the Contract Documents, he shall report it to Engineer in writing at once and before proceeding with the Work affected thereby. Work done by the Contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk. In case of conflict between the drawings and specifications, the specifications shall govern. Figure dimensions on drawings shall govern over scale dimensions, and detailed drawings shall govern over general drawings.
- B. It is the intent of the Drawings and Specifications to describe a complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. When words, which have a well-known technical or trade meaning are used to describe Work, materials or equipment, such words shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual or code in effect at the time of opening of Bids (or, on the effective date of the Agreement if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of Owner, Contractor or Engineer, or any of their agents or employees from those set forth in the Contract Documents. Clarifications and interpretations of the Contract Documents shall be issued by the Owner.
- C. The Contractor may be furnished additional instructions and detail drawings, by the engineer, as necessary to carry out the work required by the contract documents.
- D. The additional drawings and instruction supplied will become part of the contract documents. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions.
- E. The organization of the Specifications into sections, divisions, and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among the Subcontractors or in establishing the extent of Work to be performed by any trade.
- F. The Contract Documents have been made, executed, and delivered in Routt County in the State of Colorado and shall be governed and construed for all purposes under and in accordance with the laws of the State of Colorado.

- G. Reuse of Documents: Neither Contractor nor any Subcontractor, manufacturer, fabricator, supplier or distributor shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of Architect or Engineer; and they shall not reuse any of them on extensions of the Project or any other project without written consent of Owner and specific written verification or adoption by Engineer or Architect.
- H. Should a conflict occur in or between Drawings and Specifications, Contractor is deemed to have estimated on the more expensive way of doing work unless he shall have asked for and obtained written decision before submission of Bid as to which method or materials will be required.
- I. Any discrepancies found between the drawings and specifications and site conditions or any inconsistencies or ambiguities in the drawings and specifications shall be immediately reported to the engineer in writing. The engineer shall promptly correct such inconsistencies or ambiguities in writing. Work done by the contractor after his discovery of such discrepancies, inconsistencies, or ambiguities prior to Engineers issuance of a correction shall be done at the contractor's risk.
- J. The Contractor will be furnished, free of charge, 10 copies of the Contract Documents for the execution of the Work. Additional copies requested will be charged to the Contractor at cost.
- K. Schedules, Reports, and Records. The contractor shall submit to the owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the contract documents and specifications for the work to be performed.

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION

- 3.01 EXECUTION OF CONTRACT DOCUMENTS: The Contract Documents shall be signed by both the Owner and the Contractor. Signature by the Contractor on the Contract Documents is a representation that the Contractor has visited the Project Site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.
- 3.02 BEFORE STARTING CONSTRUCTION: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. Contractor shall promptly report in writing to Owner any conflict, error or discrepancy which Contractor may discover; however, Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error or discrepancy in the Drawings or Specifications, unless Contractor had actual knowledge thereof or should reasonably have known thereof.
 - A. The existence and location of underground utilities and other facilities and construction indicated as existing are not guaranteed.
 - B. Before starting any work disturbing, moving or penetrating the ground, the Contractor must have all existing utilities located and identified by the appropriate entity.
- 3.03 AVAILABILITY OF LANDS: Owner shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way for access thereto, and such other lands which are designated for the use of the Contractor. License agreements for permanent structures or permanent changes in existing facilities will be obtained and paid for by Owner,

- 3.04 **PHYSICAL CONDITIONS:** Owner shall identify and make available to Contractor copies of those reports of investigations and test of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which have been relied upon by Engineer in preparation of the Drawings and Specifications. Such reports are not guaranteed as to accuracy or complete.
- 3.05 **ASSIGNMENT:** Neither the contractor nor the owner shall sell, transfer, assign, or otherwise dispose of the contract or any portion thereof, or of his right, title, or interest therein, or his obligations thereunder, without written consent of the other party.

END OF SECTION

**SECTION 01020
ALLOWANCES**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to work of this section.

1.02 DESCRIPTION: Section includes general requirements for allowances.

- A. The Contractor shall include in the contract amount all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.
- B. Unless otherwise provided in the Contract Documents:
 - 1. Allowances shall cover the cost to the Contractor of materials and equipment delivered to the Project, less applicable trade discounts;
 - 2. The Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the contract amount but not in the allowances;
 - 3. Whenever costs are more than or less than allowances, the contract amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances under this section.
- C. Materials and equipment under an allowance shall be selected by the Owner in sufficient time to avoid delay in the Work.

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION (Not applicable)

END OF SECTION

SECTION 01025
MEASUREMENT AND PAYMENT
Attachment A – Example Base Bid Schedule

REVIEW AND COMPLETE FOR EACH PROJECT

BID ITEM NO.

01505 - 1 MOBILIZATION

A. Measurement: Mobilization will be a single lump sum item that shall include all the Contractor's costs including labor, material, and any incidental work and equipment necessary for mobilization and demobilization of personnel, equipment and supplies at the project site. This item shall also include the establishment of the Contractor's field office facilities, portable toilets and other necessary temporary facilities, temporary paving, including provisions for providing at-grade manholes, inlets, and other protrusions to the temporary street grade while temporary pavement is used, grading and restoration of staging areas, and all other costs incurred of labor and operations which must be performed prior to beginning the other items under this contract. Also include repair and restoration of any damage to pavement or landscape areas caused by construction access, repairs due to vandalism, job site security, and coordination with others performing work on the site. The removal of the Contractor's equipment, supplies, excess materials, and cleanup of the site is also included in this item. The cost for staging near the project site shall be included in Mobilization.

B. Payment: Partial payments for mobilization will be made once each month as the work progresses. These partial payments will be made as follows:

1. When 3% of the original contract amount is earned, 15 percent of the amount bid for mobilization will be paid.
2. When 10% of the original contract amount is earned, 50 percent of the amount bid for mobilization will be paid.
3. When 25% of the original contract amount is earned, 60 percent of the amount bid for mobilization will be paid.
4. When 50% of the original contract amount is earned, 95 percent of the amount bid for mobilization will be paid.
5. Upon completion of all work on the project, 100 percent of the amount bid for mobilization will be paid.
6. The total sum of all payments shall not exceed the original contract bid for the item, regardless of the fact that the Contractor, may have, for any reason, shut down the work on the project or moved equipment away from the project and then back again.

For the purpose of this Section the term "original contract amount" as used above shall mean the amount bid for the construction items in the Contract not including the amount bid for mobilization. Payment for stockpiled material will not be included as a percent of the original contract amount earned until materials are incorporated into the work.

01040 - 1 COORDINATION

A. Measurement: Measurement will be made of the actual number of utility locating potholes performed. A pothole is defined as an exploratory excavation in an undisturbed location to locate a group of subsurface utilities or for other subsurface investigation. The plans show the locations where potholing may be needed due to possible utility conflicts. Potholing shall not begin without approval by the Owner's Representative.

B. Payment: Payment shall be made at the unit price bid, and shall include all materials, equipment, labor, and other items necessary to complete.

01050 –1 CONSTRUCTION SURVEYING

A. Measurement: Measurement for construction surveying shall be a single lump sum item. Percentages paid shall coincide with percentages complete, as submitted by contractor and as approved by Owner's Representative.

B. Payment: Payment will be made at the lump sum price bid and shall include all of the Contractor's costs including labor, materials, and incidental work and equipment necessary to complete the construction surveying work.

01560 – 1 DUST CONTROL

A. Measurement: Measurement for dust control shall be a single lump sum item. Percentages paid shall coincide with percentages complete, as submitted by contractor and as approved by Owner's Representative.

B. Payment: Payment will be made at the lump sum price bid and shall include all of the Contractor's costs including labor, materials, and incidental work and equipment necessary to complete the dust control work.

01565 - 1 EROSION CONTROL

A. Measurement: Measurement for erosion control shall be a single lump sum item. Percentages paid shall coincide with percentages complete, as submitted by contractor and as approved by Owner's Representative.

B. Payment: Payment will be made at the lump sum price bid and shall include all of the Contractor's costs including labor, materials, and incidental work and equipment necessary to complete the erosion control work.

01570 – 1 TRAFFIC CONTROL SUPERVISOR

A. Measurement: The quantity to be measured for Traffic Control Supervisor (TCS) will be the number of authorized 24-hour days of active traffic control supervision performed by the TCS or another representative certified as a work site traffic supervisor. An authorized 24-hour day of active traffic control supervision shall be every calendar day on which active traffic control occurs in accordance with an approved MHT. This includes activities such as flagging operations, and setting up or removal of construction zones, shoulder closures, lane closures or detours. Traffic control devices which are left in place during non-working hours, including configurations such as lane closures or detours, are not considered active traffic control. Cleaning, maintaining, resetting, repairing, or replacing traffic control devices are considered maintenance of the devices and are not considered traffic control activities subsidiary to the TCS pay items. No payment will be made for TCS for night inspections or when construction is idle, including weekends in which no work is performed.

B. Payment: Payment will be made at the unit price bid and shall include all of the Contractor's costs including labor, materials, and incidental work and equipment necessary to complete the work.

01570 - 2 TRAFFIC CONTROL FLAGGER

A. Measurement: The quantity to be measured for flagging will be the total number of hours actually spent flagging at a required flagging location established by an approved MHT. Hours spent setting up traffic control devices is to be included in the item "Traffic Control Devices". Hours of flaggers will be based upon the flagger's time card for each hour that the flagger is on-site performing traffic control operations in accordance with the contract documents and the requirements of the Owner's Representative. Hours of flagging in excess of those authorized shall be at the Contractor's expense. The Contractor will agree to total flagger hours on a weekly basis. A spreadsheet with weekly totals will be signed by the Contractor and the Project Representative. Quantities will not be changed unless a calculation error is detected. Reimbursement for flagging shall be limited to the following areas:

1. The entire construction area under contract and for a distance of 500 feet outside the project limits or approach to project; except that if the project consists of two or more

sections, the limits will apply to each section individually.

2. Those areas beyond the above-described limits where the Owner's Representative determines the use of flaggers are necessary to provide adequate warning to traffic.

3. A detour provided on the plans or approved by the Owner's Representative for bypassing all or any portion of the construction irrespective of whether the detour termini are within the project limits.

4. The cost of all flagging for haul routes from the Contractor's materials sources to the limits of the project shall be at the Contractor's expense.

B. Payment: Payment will be made at the unit price bid and shall include all of the Contractor's costs including labor, materials, and incidental work and equipment necessary to complete the work.

01570 – 3 TRAFFIC CONTROL DEVICES

A. Measurement: Traffic Control Devices will not be measured separately but will be included in the lump sum amount. Payment will be as follows: 40% upon mobilization of the project and 10% per month thereafter until the payment for devices are made in full. Payment for traffic control devices necessary to complete the work shall be full compensation for furnishing, erecting, cleaning, maintaining, repairing, replacing, and disposing of the construction traffic control devices. Cost of electrical power, including batteries, for all temporary lighting or warning devices shown on the Traffic Control Plan will not be paid for separately but will be considered subsidiary to the item. All construction traffic control devices which are not permanently incorporated into the project will remain the property of the Contractor. Preparation of MHT's will be not paid for separately but include in the item for Traffic Control Devices. Special signs for pedestrian and vehicle traffic control as defined in the specifications will not be paid for separately but will be included in the lump sum amount.

B. Payment: Payment will be made at the lump sum price bid and shall include all of the Contractor's costs including materials, incidental work, and equipment necessary to supply and operate traffic control devices.

02050 – 1 REMOVALS AND RESETS

A. Measurement: Measurement for removals and resets shall be a single lump sum item. Percentages paid shall coincide with percentages complete, a schedule of values shall be submitted by the Contractor showing all removal and reset items as listed on sheet DM1.0 for approval by the Owner's Representative.

B. Payment: Payment will be made at the lump sum price bid based on percentages complete, using the approved schedule of values for removals.

02125 – 1 TREE PROTECTION

A. Measurement: Measurement for tree protection shall be made of the actual number of trees protected in accordance with the drawings, and as directed by the Owner's Representative.

B. Payment: Payment for this bid item shall be at the unit price bid and shall include all materials, labor and equipment necessary to complete tree protection as shown on the drawings and in accordance with the specifications.

02200/2221 – 1 UNCLASSIFIED EXCAVATION

A. Measurement: Unclassified Excavation shall not be measured but will be the quantity in cubic yards designated in the bid schedule. Excavation shall include all types of soil, earth, or rock, and all debris, trash, rock, or other materials encountered which must be removed in order to allow construction to the lines and grades shown on the plans. Percentages paid shall coincide with percentages complete, as submitted by contractor and as approved by Owner's Representative.

B. Payment: Payment shall include all equipment, excavation, loading, transporting, stockpiling, disposing, hauling off, re-transporting to fill locations (from locations of excavation or from on-site or off-site stockpiles), watering, compaction, subgrade preparation, measuring of subgrade

to bring within tolerances, backfilling, dust control, mud control, rough grading and fine grading as required to bring the site to the required lines and grades. Stripping, stockpiling, and replacement of topsoil are measured separately and are not included in this bid item.

02200 - 2 OFF SITE HAULING AND DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL

A. Measurement: Measurement for off site hauling and disposal of unsuitable excavated materials shall be made of the actual number of cubic yards of unsuitable excavated material removed, hauled off and disposed of if encountered in the subgrade to the depth determined by the Owner's Representative in areas not part of utility service or trench placement and construction. The Contractor is to assume that all material excavated for utility trenches will be removed and replaced with suitable material and that removal and replacement will be included in the cost of that utility work. Owners Representative must authorize payment for all unsuitable material to be disposed of. The Contractor and Owners Representative shall measure excavated area and agree upon the dimensions for payment.

B. Payment: Payment for this bid item shall be at the unit price bid and shall include all materials, labor and equipment necessary to complete off site hauling and disposal of unsuitable excavated material as shown on the drawings and in accordance with the specifications.

2200- 3 OFF SITE IMPORT AND PLACEMENT OF SUITABLE BACKFILL MATERIAL

A. Measurement: Measurement for off site import and placement of suitable backfill material shall be made of the actual number of cubic yards of aggregate base course and geotextile fabric required for backfill of unsuitable excavated material, compacted per specifications, in place to bring the unsuitable excavated material areas to the grades required for the roadway subgrade in areas not part of utility service or trench placement and construction. Suitable backfill material will not be measured of backfilling related to utility placement activities except when unsuitable subgrade of utility trench below trench excavation prism is required. The quantity measured as unsuitable material removal will be used as the quantity of offsite import unless the material used is an existing item. If an existing item is being used for fill, that item unit will be paid. B. Payment: Payment for this bid item shall be at the unit price bid and shall include all materials, labor and equipment necessary to complete off site import and placement of suitable backfill material as shown on the drawings and in accordance with the specifications.

02232 - 1 AGGREGATE BASE COURSE (CLASS 6)

A. Measurement: Aggregate base course (Class 6) shall not be measured but will be the quantity of cubic yards designated in the bid schedule. Material will be placed in accordance with the construction documents for pavement subgrade, foundations, and pavement surfacing. Work shall include the preparing subgrade, and furnishing, placing, grading, and compaction.

B. Payment: Payment will be made per cubic yard furnished and placed in accordance with the contract documents. Aggregate Base Course used for utility and/or pipe bedding will not be paid for separately but shall be paid for as part of the particular pipe construction pay item.

02232 – 2 AGGREGATE BASE COURSE (CLASS 1) (WELL GRADED PIT RUN)

A. Measurement: Aggregate base course (Class 1) shall not be measured but will be the quantity of cubic yards designated in the bid schedule. Material will be placed in accordance with the construction documents for pavement subgrade, foundations, and pavement surfacing. Work shall include the preparing subgrade, and furnishing, placing, grading, and compaction.

B. Payment: Payment will be made per cubic yard furnished and placed in accordance with the contract documents. Aggregate Base Course used for utility and/or pipe bedding will not be paid for separately but shall be paid for as part of the particular pipe construction pay item.

Section 2236 Crusher Fines

4.1 Measurement

A. Measurement for crusher fines paving shall be measured by the square foot.

B. Measurement for the installation, grading and compaction shall be included in the price of the crusher fines paving.

4.2 Payment

A. Crusher fines paving work shall be paid for at the contract unit price as bid in the Proposal. Compacted sub-grade shall be included in the cost and paid for at the contract unit price as bid in the Proposal. The price bid includes furnishing all labor, equipment and materials necessary for completing the work in place as specified in the Drawings.

02270 – 1 RIPRAP

A. Measurement: Measurement will be made per cubic yard of riprap furnished and installed in accordance with the construction documents. Work shall include the preparing subgrade, and furnishing, placing, grading, and compaction in accordance with the Drawings and as directed by the Owner's Representative.

B. Payment: Payment shall be made at the unit price bid, and shall include all materials including fabric, equipment, labor, and other items necessary to complete the work as shown on the drawings and in accordance with the specifications. Scope of work shall include subgrade preparation.

02513 – 1 ASPHALT PATCHING

A. Measurement: Measurement will be made per ton of asphalt/hot bituminous pavement (HBP) placed for final subgrade construction furnished and installed in accordance with the contract documents. Work shall include the preparing subgrade, providing tack coat to edges of structures protruding into the pavement layer, furnishing, placing, grading, and compacting the asphalt pavement. The tonnage shall be the mass (weight) used in the accepted pavement. Deduction will not be made for the mass (weight) of bituminous material in the mixture.

B. Payment: Payment will be made per ton of asphalt/hot bituminous pavement (HBP) placed for final subgrade construction furnished and installed in accordance with the contract documents. Work shall include the preparing subgrade, providing tack coat to edges of structures protruding into the pavement layer, furnishing, placing, grading, and compacting the asphalt pavement. Bituminous material, water used in the mixing, and facilities to test the mix at the plant will not be paid for separately but shall be included in the work.

02933 – 1 NATIVE GRASS SEEDING

A. Measurement: Measurement will be made of the actual number of square feet of native grass seed and mulch installed and accepted at the locations within the limit of work as shown on the drawings or as directed the Owner's Representative, and in accordance with the specifications. No separate measurement will be made for areas disturbed outside the limit of work. These disturbed areas will be seeded at the Owner's Representative's discretion and at the contractor's own expense.

B Payment: Payment for this item will include all the Contractor's costs of whatever nature to complete the seeding and overseeding in accordance with the Specifications. Payment shall include soil preparation, discing, raking, spreading, and fine grading; furnishing and installation of seed and mulch materials; temporary protection by fencing or other means; watering and all other required maintenance until Final Acceptance of the work.

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 – GENERAL

1.01 DESCRIPTION

A. General:

1. All measurements and payments will be based on work completed in strict accordance with the plans and specifications for the project.
2. The method of measurement and basis of payment described are for the work itemized in the Bid Form and in the sections of the specifications. Items may include work within a single section or in more than one section.
3. The Contract Sum is stated in the Contract Documents and, including authorized changes and adjustments, the total amount payable by the Owner to the Contractor.

B. Measurement:

1. Unless otherwise specified, all longitudinal measurements will be made horizontally, and computations will be based on the dimensions shown on drawings and details.
2. Quantities will be rounded off to the nearest whole number.
3. The Contractor shall, in the presence of the Owner and/or Project Engineer, verify all measurements and quantities required for payment by the unit price method.
4. The Contractor shall, in the presence of the Owner and/or Project Engineer, measure all “Removal” items prior to undertaking the “Removal” items.
5. Contractor shall provide necessary equipment, workers, and survey personnel as required for measurements.

C. Units

1. Measurement by Volumes: Measurement by cubic dimension using mean length, width and height or thickness. Longitudinal measurements will be made horizontally.
2. Measurements by Area: Measured by square dimensions using mean length and width or radius, measured horizontally.
3. Linear Measurement: Measured by linear dimension at the item centerline or mean chord.
4. Measured by Lump Sum or Per Each: Item inclusion as specified by the bid item description.
5. Measured by weight: Measured by certified scales at the source of material.

D. Payment:

1. Unit bid prices, as quoted in the Bid Schedule, shall constitute full compensation for labor, materials, equipment, rentals, overhead, profit and incidentals to complete all work for each

pay item and for all risk, loss, damage, or expense of whatever nature arising from the nature of the work or prosecution thereof.

2. Work or materials that are essential to the work, but for which there are no pay items, will not be measured and paid for separately, but shall be included in other items of work.
3. Payment for work listed as lump sum bid items completed under this contract shall be paid for on a lump sum fixed price basis. A schedule of values shall be provided to the Owner prior to construction on an item measured as a lump sum. The schedule of values shall clearly detail the Work item for partial payments.
4. At least ten (10) days before each progress payment falls due (but not more often than once a month), the Contractor will submit to the Owner's representative a partial payment estimate filled out and signed by the Contractor covering the work performed during the period covered by the partial payment estimate and supported by such data as the Owner's Representative may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the work but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the Owner, as will establish the Owner's title to the material and equipment and protect his interest therein, including applicable insurance. The Owner's Representative will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the Owner, or return the partial payment estimate to the Contractor indicating in writing his reasons for refusing to approve payment. In the latter case, the Contractor may make the necessary corrections and resubmit the partial payment estimate. The Owner will, within fifteen (15) days of presentation to him of an approved partial payment estimate, pay the Contractor a progress payment on the basis of the approved partial payment estimate.
 - a) On a daily basis, the Contractor shall measure all unit price work which cannot be readily measured in the field after the work has been completed. No less than weekly, the Contractor shall submit an itemized list of all such work with backup data to the Owner's Representative for review. No payment shall be made for any such work unless the procedure in this paragraph as been followed.
 - b) The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
5. At least ninety percent of the calculated value of any work completed shall not be paid until fifty percent of the work required by the contract has been performed. Thereafter, the Owner shall pay any of the remaining installments without retaining additional funds if, in the opinion of the Owner, satisfactory progress is being made in the work. The withheld percentage of the contract price of any such work, improvement, or construction shall be retained until the contract is completed satisfactorily and finally accepted by the Owner.
6. If the Owner fails to make payment thirty (30) days after approval by the Owner's Representative, in addition to other remedies available to the Contractor, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the Contractor.
7. The Owner's Representative's recommendation of any payment requested in an application for payment will constitute a representation by Owner's Representative to Owner based on Owner's Representative's review of the application for payment and the accompanying data and schedules that the work has progressed to the point indicated; that, to the best of

Owner's Representative's knowledge, information and belief, the quality of the work is in accordance with the contract documents (subject to an evaluation of the work as a functioning project upon substantial completion, to the results of any subsequent tests called for in the contract documents and any qualifications stated in the recommendation) and the Contractor is entitled to payment of the amount recommended. However, by recommending any such payment Owner's Representative will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the work, or that the means, methods, techniques, sequences, and procedures of construction have been reviewed or that any examination has been made to ascertain how or for what purpose Contractor has used the moneys paid or to be paid to Contractor on account of the contract prices, or that title to any work, materials, or equipment has passed to Owner free and clear of any liens.

8. The Owner's Representative may refuse to recommend the whole or any part of any payment if, in his opinion, it would be incorrect to make such representations to Owner. He may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or test, nullify any such payment previously recommended to such extent as may be necessary in Owner's Representative's opinion to protect Owner from loss because:
 - a) The work is defective, or completed work has been damaged requiring correction or replacement;
 - b) Written claims have been made against Owner or liens have been filed in connection with the work;
 - c) The contract price has been reduced because of modifications;
 - d) Owner has been required to correct defective work or complete the work;
 - e) Of Contractor's unsatisfactory prosecution of the work in accordance with the contract documents, or;
 - f) Contractor's failure to make payment to subcontractors or for labor, materials or equipment.
9. When the Contractor considers the entire work ready for its intended use Contractor shall, in writing to Owner, Owner's Representative, and Project Engineer, certify that the entire work is substantially complete and request that Project Engineer issue a certificate of substantial completion. Within a reasonable time thereafter, Owner, Contractor, and Project Engineer shall make an inspection of the work to determine the status of completion.
 - a) If the inspection reveals deficiencies on the project, the Contractor shall immediately remedy all deficiencies as listed on a punch list provided by the Owner and Project Engineer. Upon completion of the punch list items the Contractor shall repeat the procedure in the above paragraph. The process shall be repeated until the Owner issues a letter of preliminary acceptance for the project. Upon receiving the letter of preliminary acceptance the Project Engineer will issue a certificate of substantial completion and recommend final project payment. Conditions may be attached to the certificate to include withholding enough money to cover the cost of any deficiencies. The date of the letter of preliminary acceptance begins the one-year warranty. It is important to receive the letter of preliminary acceptance in the same construction season as the work was performed. Inspection and acceptance by the Owner after November 1 may be made only by special request and only if weather allows.

- b) Final payment to the Contractor will not be made, the one-year warranty will not begin, and the Contractor shall remain liable for maintenance of the project until the letter of preliminary acceptance is issued.
 - c) One month prior to the expiration of the one-year warranty period the Contractor shall request in writing a final inspection and final acceptance. The Owner and/or Project Engineer will conduct the final inspection. If this inspection reveals deficiencies in the materials or workmanship, the Contractor shall make any repairs necessary under the one-year warranty. If any deficiencies are due to normal wear and tear, the Owner may request that repairs be done on a time and materials basis as negotiated with the Contractor.
 - d) The Owner will issue a letter of final project acceptance if the final inspection reveals no deficiencies and all warranty work has been satisfactorily completed. Effective on the date of the letter of final project acceptance, Contractor shall be relieved of all warranty except for a one-year warranty on items repaired under the one-year warranty.
10. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Project Engineer multiplied by the unit price for Work which is incorporated in or made necessary by the Work.
11. Upon completion and acceptance of the work, the Owner's Representative shall issue a certificate attached to the final payment request that the work has been accepted by him under the conditions of the contract documents. The entire balance found to be due the Contractor, including the retained percentages, but except such sums as may be lawfully retained by the Owner, shall be paid to the Contractor within thirty (30) days of completion and acceptance of the work.
12. Prior to the substantial completion, the Owner, with the approval of the Owner's Representative and with the concurrence of the Contractor, may use any completed or substantially completed portions of the work. Such use shall not constitute an acceptance of such portions of the work.
13. Neither recommendation of a progress or final payment by Owner's Representative, nor the issuance of a certificate of substantial completion, nor any payment by Owner to Contractor under the contract documents, nor any use of occupancy of the work or any part thereof by Owner, nor any act of acceptance by Owner nor any failure to do so, nor the issuance of a notice of acceptability by Owner's Representative, nor any correction of defective work by Owner shall constitute an acceptance of work not in accordance with the contract documents or a release of Contractor's obligation to perform the work in accordance with the contract documents.
14. The Contractor will indemnify and save the Owner or the Owner's agents harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment tools and all supplies, incurred in the furtherance of the performance of the work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived. If the Contractor fails to do so the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of the contract documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, his surety, or any third party. In paying any unpaid bills of the Contractors, any payment so made by the Owner shall be considered as a payment made under the contract

documents by the Owner to the Contractor, and the Owner shall not be liable to the Contractor for any such payments made in good faith.

- E. Partial Utilization: Use by Owner of completed portions of the Work may be accomplished prior to Substantial Completion of all the Work subject to the following:
1. Owner at any time may request Contractor in writing to permit Owner to use any part of the Work which Owner believes to be substantially complete and which may be so used without significant interference with construction of the other parts of the Work. If Contractor agrees, Contractor will certify to Owner and Owner's Representative that said part of the Work is substantially complete. Within a reasonable time thereafter, Owner, Contractor and Project Engineer shall make an inspection of that part of the Work to determine its status of completion. Prior to Owner's use, Owner's Representative will deliver to Owner and Contractor a written recommendation as to the division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, maintenance, utilities, insurance and correction periods for that part of the Work which is binding upon Owner and Contractor as to that part of the Work, unless Owner and Contractor shall have otherwise agreed in writing or shall object to the Owner's Representative in writing within fifteen (15) days of receiving Owner's Representative's recommendations. Owner shall have the right to exclude Contractor from any part of the Work which Owner uses, but Owner shall allow Contractor reasonable access to complete or correct items on the tentative list.
 2. In lieu of the provisions of paragraph 1.01E.1. above, Owner may take over operation of a facility constituting part of the Work whether or not it is substantially complete if such facility is functionally and separately useable; provided that prior to any such takeover, Owner and Contractor have agreed as to the division of responsibilities between Owner and Contractor for security, operation, safety, maintenance, correction period, heat, utilities and insurance with respect to such facility.
 3. No occupancy of part of the Work or taking over of operations of a facility will be accomplished prior to acknowledgment from the insurers providing the property insurance on the Work that notice of such occupancy has been received and that said insurers, in writing, have effected the changes in coverage necessitated thereby. The insurers providing the property insurance shall consent to such use or occupancy by endorsement on the policy or policies, but the property insurance shall not be canceled or lapse on account of any such partial use or occupancy.
 4. Unless otherwise agreed upon, partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.
- F. Substantial Completion
1. Substantial Completion is the point in the progress of the Work when the Work or a designated portion of the Work is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.
 2. When Contractor considers the entire Work ready for its intended use, Contractor shall, in writing to Owner, certify that the entire Work is substantially complete and request that Project Engineer issue a Certificate of Substantial Completion. The Contractor's request shall include a punch list of items to be completed or corrected prior to final payment. Within a reasonable time thereafter, Owner, Project Engineer, and Contractor shall make an inspection of the Work to determine the status of completion and amend the punch list if necessary. Failure to include an item on such list does not alter the responsibility of the

Contractor to complete all Work in accordance with the Contract Documents. If Project Engineer does not consider the Work substantially complete, Project Engineer will notify Contractor in writing with his reasons.

3. If the Project Engineer considers the Work substantially complete, the Project Engineer will prepare and deliver to Owner a tentative Certificate of Substantial Completion. There will be attached to the Certificate a punch list of items to be completed or corrected before Project completion and final payment. The Certificate of Substantial Completion shall establish the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate.
 4. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.
 5. The Certificate of Substantial Completion shall be signed by the Owner and Contractor of their written acceptance of the responsibilities in the Certificate. Upon signing, the Owner will make payment of retainage applying to the Work identified in the Certificate, with appropriate adjustments for uncompleted or work not in accordance with the Contract Documents.
- G. Final Inspection: Upon written notice from Contractor that the Work is complete and that all items on the punch list have been completed, Project Engineer will make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to remedy such deficiencies.
- H. Final Application for Payment: After Contractor has completed all such corrections to the satisfaction of Project Engineer and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents and other documents all as required by the Contract Documents, and after Project Engineer has indicated that the Work is in accordance with the Contract Documents, Contractor may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents and such other data and schedules as Owner's Representative may reasonably require, together with complete and legally effective releases or waivers (satisfactory to Owner) of all Claims arising out of or filed in connection with the Work. In lieu thereof and as approved by Owner, Contractor may furnish receipts or releases in full; an affidavit of Contractor that the releases and receipts include all labor, services, material and equipment for which a Claim could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or its property might in any way be responsible, have been paid or otherwise satisfied; and consent of the Surety, if any, to final payment. If any Subcontractor, manufacturer, fabricator, supplier or distributor fails to furnish a release or receipt in full, Contractor may furnish a Bond or other collateral satisfactory to Owner to indemnify Owner against any Claim.
- I. Final Payment and Acceptance
1. If, on the basis of Project Engineer's observation of the Work during construction and final inspection, and Project Engineer's review of the final Application for Payment and accompanying documentation all as required by the Contract Documents, Project Engineer is satisfied that the Work has been completed and Contractor has fulfilled all of his obligations under the Contract Documents, Owner's Representative will, within ten (10)

days after receipt of the final Application for Payment, indicate in writing his recommendation of payment and present the Application to Owner for payment. Thereupon Owner's Representative will give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of the Waiver of Claims below. Otherwise, Owner's Representative will return the Application to contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application. If the application and accompanying documentation are appropriate as to form and substance, and acceptable to Owner, Owner shall, within thirty (30) days thereof, cause publication to commence of Notice of Final Settlement, in accordance with statutory requirements applicable to Owner. In the event no claims are made against Contractor in response to said publication, Owner shall pay Contractor the amount of final payment recommended, including any retainage, by the Owner's Representative in accordance with the Notice of Final Settlement. In the event any claim is made against Contractor, Owner may withhold up to twice the amount of any asserted claim against Contractor until said claim has been resolved together with other amounts permitted by the Contract; however, Owner shall pay Contractor the balance of the final payment net of the withheld amount.

2. If, through no fault of Contractor, final completion of the Work is significantly delayed and if Owner's Representative so confirms, Owner shall, upon receipt of Contractor's final Application for Payment and recommendation of Owner's Representative, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, and if Bonds have been furnished, the written consent of the Surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Owner's Representative with the Application for such payment. Payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.
3. The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor other than claims in stated amounts as may be specifically excepted by the Contractor for all things done or finished in connection with this work and for every act and neglect of the Owner and other relating to or arising out of this work. Any payment, however, final or otherwise, shall not release the Contractor or his sureties from any obligations under the contract documents or the performance bond and payment bonds.

J. Waiver of Claims: The making and acceptance of final payment shall constitute:

1. A waiver of all claims by Owner against Contractor, except claims arising from unsettled Claims, from defective Work appearing from final inspection pursuant to the Contract Documents or from failure to comply with the Contract Documents or the terms of any special guarantee specified therein; however, it shall not constitute a waiver by Owner of any rights in respect of Contractor's continuing obligations under the Contract Documents; and
2. A waiver of all claims by Contractor against Owner other than those previously made in writing and identified by the Contractor as unsettled at the time of the Final Application for Payment.

ATTACHMENT A: BASE BID SCHEDULE **TO BE COMPLETED FOR EACH PROJECT**

END OF SECTION

SECTION 01030

ALTERNATES / SUBSTITUTIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.

1.02 ALTERNATES

- A. The Contractor shall request in writing any proposed material alternates or substitutions well in advance of ordering and shall provide all information that will allow a comparison of any proposed material alternate or substitution.
- B. The Contractor may make material alternates or substitutions only with the written approval of the Project Engineer and as documented in a Change Order.
- C. Whenever a material, article or piece of equipment is identified on the drawings or specifications by reference to brand name or catalogue number, it shall be understood that this be referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The Contractor may recommend the substitution of a material, article or piece of equipment of equal substance and function for those referred to in the contract documents by reference to brand name or catalogue number, and if, in the opinion of the Project Engineer, such material, article or piece of equipment is of equal substance and function to that specified, the Project Engineer may approve its substitution and use by the Contractor. Any cost differential shall be deductible from the contract price and the contract documents shall be appropriately modified by change order. The Contractor warrants that if substitutes are approved, no major changes in the function or general design of the project will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the contract price or contract time.
- D. Substitutions may be accepted by the Project Engineer if sufficient information is submitted by the Contractor to allow the Project Engineer to determine that the material or equipment proposed is equivalent to that named in the specifications. The procedure for review by the Project Engineer will be as set forth below:
 - 1. Request for review of substitute items of material and equipment will not be accepted by Project Engineer from anyone other than Contractor. If Contractor wishes to furnish or use a substitute item of material or equipment, Contractor shall make written application to Project Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equal substance to that specified, and be suited to the same use and capable of performing the same function as that specified. The application will state whether or not acceptance of the substitute for use in the work will require a change in the drawings or specifications to adapt the design to the substitute and whether or not incorporation of use of the substitute in connection with the work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application, and available maintenance, repair and replacement service will be indicated. The application will

2. Project Engineer will record time required by Owner and Owner's consultants in evaluating substitutions proposed by Contractor and in making changes in the drawings or specifications occasioned thereby. Whether or not Project Engineer accepts a proposed substitute, Contractor shall reimburse Owner for the charges of Project Engineer and Owner's consultants for evaluating any proposed substitute.

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION (Not applicable)

END OF SECTION

SECTION 01035

MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.

1.02 CHANGES IN WORK

- A. The Owner may at any time, as the need arises, order changes within the scope of the work without invalidating the agreement. If such changes increase or decrease the amount due under the contract documents, or in the time required for performance of the work, an equitable adjustment shall be authorized by Change Order.
- B. The Project Engineer may also, at any time, issue a field order for the purpose of clarification, information, warnings, or changes in the details of the work. The Contractor shall proceed with the requirements of the order as indicated. If the Contractor believes that such field order entitles him to a change in the contract price or time, or both, he shall notify the Project Engineer in writing within 7 days and return a copy of the field order to the Project Engineer, with the amount of change in the contract time and price noted, within 30 days. Determination of changes in contract price will be made in accordance with 1.03 Changes in the Contract Price below. Field order and associated costs will be authorized by change order. If so directed, the Contractor may commence directed work prior to initiation of a change order.
- C. The Contractor may at any time submit a clarification request to the Project Engineer for the purpose of clarification, information or proposed changes in the details of work. The clarification request shall be subject to the Project Engineer's review and the Contractor may proceed with clarification request requirements, if applicable, as approved by the Project Engineer. Adjustments to the contract price or time should be included with the clarification request. Clarification requests shall be authorized by change order as described above.
- D. The Owner's Representative shall supply the Contractor with the above forms and additional information following project initiation.

1.03 CHANGES IN THE CONTRACT PRICE

- A. The contract price may be changed only by a change order. The value of work covered by a change order or of any claim for increase or decrease in the contract price shall be determined by one or more of the following methods in the order of precedence listed below:
 - 1. Unit prices previously approved
 - 2. An agreed lump sum
 - 3. Force Account

- B. Unit prices shall be the preferred means for adjusting the contract price.
- C. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed by plus or minus twenty (20) percent so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.
- D. If unit prices do not exist for added or deleted work, the Owner's Representative and the Contractor shall endeavor to agree on a lump sum price for the added or deleted work.
- E. If the Owner's Representative and the Contractor cannot agree to a lump sum price for the added or deleted work, a Force Account method of determining the adjustment shall be utilized to determine the adjustment in contract price for the added or deleted work. Detailed records of actual hours for labor and equipment and an account of materials used will be made daily by the Project Engineer and agreed to by the Contractor.
- F. The value of the increase or decrease shall be determined by the Owner's Representative on the basis of actual costs and a percentage for overhead and profit. Costs shall only include labor (payroll, payroll taxes, fringe benefits, workmen's compensation, etc.), materials, equipment, and other incidentals directly related to the work involved. The maximum percentage allowed for contractors' combined overhead and profit, shall be as follows:
 - 1. For all such work done by his own organization, the Contractor may add up to 10% of his actual net increase in costs.
 - 2. For all such work done by subcontractors, each subcontractor may add up to 10% of his actual net increase in costs for combined overhead and profit. The Contractor may also add up to 5% of the subcontractor's total for his combined overhead and profit, provided that no overhead or profit shall be allowed on costs incurred in connection with premiums for public liability insurance or other special insurance directly related to such work.
 - 3. In such case the Contractor will submit in form prescribed by the Owner's Representative an itemized cost breakdown together with supporting data. Supporting data shall include certified payrolls, equipment costs (actual or by Rental Rate Blue Book of Rental Rates for Construction Equipment); and material invoices.
 - 4. The amount of credit to be allowed by the Contractor to the Owner for any change that results in a net decrease in cost will be the amount of the net cost decrease as determined by the Owner's Representative, as described above, plus a percentage for combined overhead and profit as outlined above. When both additions and credits are involved with any one change, the combined overhead and profit shall be figured on the basis of the net increase or decrease. The Contractor will not be required to credit actual incurred overhead expenses to the Owner on change orders involving net decreases to the contract price.

1.04 TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- A. The date of beginning and the time for completion of the work are essential conditions of the contract documents, and the work embraced shall be commenced on a date specified in the notice to proceed as agreed by the Owner's Representative and the Contractor at the Pre-Construction meeting.

- B. The Contractor will proceed with the work at such rate of progress to ensure full completion within the contract time. It is expressly understood and agreed by and between the Contractor and Owner that the contract time for completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work. Adverse weather is not a condition for a time extension for the work or the basis for any claim.
- C. If the Contractor fails to complete the work within the contract time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount for liquidated damages as specified in the bid for each calendar day that the Contractor shall be in default after the time stipulated in the Contract documents.
- D. The Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due to the following, and the Contractor has promptly given written notice of such delay to the Owner or Owner' Representative.
 - 1. To any preference, priority or allocation order duly issued by the Owner.
 - 2. To unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to: acts of God, or of the public enemy; acts of the Owner; acts of another contractor in the performance of a contract with the Owner; fires; floods; epidemics; quarantine restrictions; strikes; freight embargoes; and abnormal and unforeseeable weather.
 - 3. To any delays of subcontractors occasioned by any of the causes specified in paragraphs 1.04 D 1. and 1.04 D 2. of this SECTION.
- E. When any period of time is referred to in the Contract documents by days, it will be computed to exclude the first day and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation. A calendar day of 24 hours measured from midnight to the next midnight shall constitute a day.

1.05 SUBSURFACE CONDITIONS

- A. The Contractor shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the Owner by written notice of:
 - 1. Subsurface or latent physical conditions at the site differing materially from those indicated in the contract documents; or
 - 2. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract documents.
- B. The Contractor shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the work, an equitable adjustment shall be made and the contract documents shall be modified by a change order. Any claim of the Contractor for adjustment hereunder shall not be allowed

- C. In the event the Contractor and the Owner's Representative are unable to reach an agreement concerning the alleged changed conditions, the Contractor shall keep an accurate and detailed cost record which will indicate not only the cost of the work done under the alleged changed conditions, but the cost of any remaining unaffected quantity of any bid item which has had some changed conditions. Failure to keep such a record shall be a bar to any recovery of costs by reason of such alleged changed conditions. Such cost account records will be kept with the same particularity as force account records, and the Owner's Representative shall be given the same opportunity to supervise and check the keeping of such records as is done in the force account work.

- D. Records are to include, but not be limited to: date; weather conditions; equipment type (hours used, work performed and location); personnel (work performed hours worked and location); subcontractors on project; nature of unusual or differing site condition; delays, disruptions and out of sequence work; and daily production, anticipated vs. actual.

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION (Not applicable)

END OF SECTION

SECTION 01040

COORDINATION

PART 1 – GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.

1.02 DESCRIPTION:

- A. Section Includes: Requirements for coordination, supervision and administration for the Work, including but not necessarily limited to:

1. Coordination
2. Administrative and supervisory personnel
3. Owner's Responsibilities
4. Contractor's Responsibilities
5. Project Engineer's Responsibilities
6. General installation provisions
7. Cleaning and protection
8. Utilities and site work

1.03 RELATED WORK:

- A. Section 01010 – Summary of Work
- B. Section 01105 – Administration, Procedures and Codes
- C. Section 01035 – Modification Procedures
- D. Section 01200 – Project Meetings
- E. Section 01045 – Engineering Services

1.04 GENERAL COORDINATION:

- A. General: For a successful Project for the City of Steamboat Springs and its businesses and residents, cooperation will be needed from all involved. The goal is success afforded to the Owner, the Contractor, and those who will be impacted by the Project.
 1. The Contractor shall ensure that each entity involved in the performance of the Work shall cooperate in the overall coordination of the Work; promptly, when requested by the Contractor, furnish information concerning the entity's portion of the Work; and respond

2. The Contractor shall, where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 3. The Contractor shall prepare similar memoranda for the Owner and separate contractors where coordination of their work is required.
- B. Administrative Procedures: Contractor to coordinate scheduling and timing of required administrative procedures with other construction work. Such administrative activities include, but are not limited to, the following:
1. Preparation of schedules
 2. Installation and removal of temporary facilities
 3. Preparation and submittal of payment requests
 4. Delivery and processing of submittals
 5. Progress meetings
 6. Project close-out activities
- C. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water and materials. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work. Refer to other sections for disposition of salvaged materials that are designated as the Owner's property.
- D. Site Utilization: In addition to the site utilization limitations and requirements shown on the Drawings and indicated by the Contract Documents, administer the allocation of available space equitably among entities needing access and space, so as to produce the best overall efficiency in the performance of the Work.
- E. Layout: It is recognized that the Contract Documents are diagrammatic in showing certain physical relationships of the various elements and systems and their interfacing with other elements and systems. Establishment and coordination of these relationships is the exclusive responsibility of the Contractor. Do not scale the Drawings. Layout and arrange all elements to contribute to safety, efficiency and to carry the harmony of design throughout the Work. In case of conflict or un-dimensioned locations, verify required positioning with the Owner's Representative. The Contractor shall provide surveying for the layout of all improvements including both horizontal and vertical control. The Project Engineer will provide base datum.
- F. Substrate Examination: The Contractor shall ensure that the subcontractor of each element of the Work examines the conditions of the substrate to receive the work, dimensions and spaces adjacent, tolerances, interfacing with other elements and services, and the conditions under which the Work will be performed. The Contractor shall require each subcontractor to notify the Contractor in writing of conditions detrimental to the proper or timely completion of the Work, and ensure that they do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to the subcontractor.

- G. Coordination Meetings: Include in scheduled meetings, coordination of various entities and activities for the construction and public involvement as set forth in Section 01200. Where and when necessary, schedule additional coordination meetings for this purpose.
- 1.05 COMPLETE SYSTEMS: It is the intent of the Contract Documents that the system be complete and functional to provide the intended or specified performance. The Contractor shall provide all incidental items and parts necessary to achieve this requirement.
- 1.06 COMPATIBILITY: Provide products and equipment which are compatible with other work requiring mechanical and electrical interface including connections, control devices, water, drain and other piping connections. Verify requirements and other interface requirements before ordering equipment and resolve conflicts that may arise.
- 1.07 ADMINISTRATIVE AND SUPERVISORY PERSONNEL COORDINATION: In addition to the responsibilities elsewhere in the Contract Documents, specific coordination responsibilities are herein defined for the Owner and Contractor.

A. OWNER'S COORDINATION RESPONSIBILITIES

1. Except as otherwise provided in these General Conditions, Owner will issue all communications to Contractor through the Owner's Representative. The term "Owner" means the Owner or the Owner's Representative or the Resident Project Representative.
2. Owner's Representative will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents (in the form of Drawings or otherwise) as Owner's Representative may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.
3. The Owner will furnish surveys describing physical characteristics, and legal limitations for the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions that relate to the safe performance of the Work.
4. Owner's Representative will provide special event information in Steamboat Springs with reasonable promptness so as to allow the Contractor to coordinate his day to day activities.
5. Information or services required of the Owner by the Contract Documents will be furnished by the Owner with reasonable promptness. Any other information or services relevant to the Contractor's performance of the Work under the Owner's control shall be furnished by the Owner after receipt from the Contractor of a written request for such information or services.
6. The Owner's Representative will be responsible for updating the media and general public with regards to project status.
7. Neither Owner's Representative nor Owner's authority to act under this section or elsewhere in the Contract Documents nor any decision made by Owner's Representative or Owner in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of Owner's Representative or Owner to Contractor, any Subcontractor, any manufacturer, fabricator, supplier, or distributor, or any of their agents or employees or any other person performing any of the Work.
8. Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed" or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper" or "satisfactory" or adjectives of like effect or import are

9. The Owner may request the dismissal of any person or persons employed by the Contractor in, about, or upon the Work who shall misconduct himself or themselves or be incompetent or negligent in the proper performance of his or their duties, or neglect(s) or refuse(s) to comply with the Contract Documents given and such person or persons shall not be employed again thereon without the written consent of the Owner's Representative. Should the Contractor continue to employ, or again employ, such person or persons on the Project, the Owner may withhold all pay estimates, which are or may become due, or the Owner may suspend the Work until such orders are complied with.

B. CONTRACTOR'S RESPONSIBILITIES

1. The Contractor shall verify all dimensions and notes, both existing and proposed, prior to beginning any work. Any errors, inconsistencies or omissions shall be brought to the attention of, the Owner's Representative prior to construction.
2. Before starting any Work on the Project, the Contractor, in the presence of the Owner's Representative, shall make a video taped documentary of the existing Project Site conditions, including streetscape, features and buildings. A copy of the video taped documentary shall be delivered to the Owner's Representative prior to any construction. The video taped documentary is to be used to provide documentation of the existing conditions of the streetscape and buildings at the Project Site. Existing damage to streetscape, features, and buildings shall be documented. As excavation progresses and video taped updates or photographs shall be provided by the Contractor, also in the presence of the Owner's Representative. Video tapes and photographs shall be time and date stamped.
3. Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the various documents in the Contract Documents and information provided to the Contractor relative to that portion of the Work. The Contractor shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions on the site affecting it. These responsibilities are to facilitate construction by the Contractor and are not for the purpose for discovering errors, omissions, or inconsistencies in the Contract Documents. Any errors, omissions, or inconsistencies in the Contract Documents discovered by the Contractor shall be reported promptly to the Owner's Representative as a request for information.
4. Any design errors or omissions noted by the Contractor during this review shall be reported promptly to the Owner's Representative, but it is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional unless otherwise specifically provided in the Contract Documents. The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations, but any nonconformity discovered by or made known to the Contractor shall be reported promptly to the Owner's Representative.
5. If the Contractor believes that additional cost or time is involved because of clarifications or instructions issued by the Owner's Representative in response to the Contractor's notices

6. The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work. Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
7. Contractor acknowledges that he has not acted or relied upon any express or implied representation or warranty of the Owner's Representative, Engineer or Architect.
8. Owner, Owner's Representative, Project Engineer and Architect shall have no liability to Contractor for delays in the review of Shop Drawings, Product Data or Samples unless at the commencement of the construction phase Contractor has submitted a written schedule for all Shop Drawings, Product Data and Samples reviews to Owner's Representative, which, Owner's Representative accepted in writing and Owner's Representative intentionally failed or refused to review Shop Drawings, Product Data and Samples in accordance with such schedule. Contractor shall make reasonable revisions to the schedule at the request of Owner's Representative.
9. Contractor is required to coordinate his activities with the businesses for best progress and least overall impact to the community.
10. Contractor is required to coordinate his activities with the special events in the project area through the Owner's Representative.
11. Contractor is required to coordinate with Owner's Representative and all City of Steamboat Springs departments, emergency service entities, and effected businesses regarding road closures.
12. The Contractor shall provide the Owner, Owner's Representative, Project Engineer, Architect, utility company representatives, and other persons authorized by the Owner, sufficient notice prior to work in cases where the other parties need to observe and document work. The Contractor shall provide access to the Work in preparations and progress wherever located to the noted parties.

13. PROTECTION OF WORK PROPERTY AND PERSONS

- a) The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the work and other persons who may be affected thereby; all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site; and other property at the site or adjacent thereto,

- b) The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the work may affect them. The Contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, whole or in part, by the Contractor, any subcontractor or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, except damage or loss attributable to the fault of the contract documents or to the acts or omissions of the Owner or the Owner' Representative of anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable directly to indirectly in whole or in part, to the fault or negligence of the Contractor.
- c) In emergencies affecting the safety of persons of the work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Owner' Representative or Owner, shall act to prevent threatened damage, injury or loss. He will give the Owner' Representative prompt written notice of any significant changes in the work or deviations from the contract documents caused thereby, and a change order shall thereupon be issued covering the changes and deviations involved.
- d) The utilities shown on the drawings are a representation of the existing utility locations to the best knowledge of the Owner' Representative. Field locations shown are approximate only. The utility information provided is solely for the purpose of aiding the Contractor in the bidding process and in no way relieves the Contractor from obtaining timely field locations of utilities or in confirming the existence of utilities which may or may not be shown on the Drawings.
- e) The Contractor shall be responsible for the notification of and coordination with all utility companies for accurate field locations of utilities that may be damaged by the Contractor during the performance of work. If blasting is required in the vicinity of natural gas pipelines, the Contractor shall request a leak survey as required by Federal Law.
- f) The immediate repair of damaged utilities or special precautions required to protect existing utilities from damage shall be the Contractor's responsibility.
- g) Where existing fences and improvements are present, the Contractor shall be responsible for removing and replacing such items as part of the work. Items are to be restored to at least an equal quality to that which existed prior to disturbance. The cost for such work is to be incorporated into other bid items.
- h) When the use of explosives is necessary for the prosecution of the work, the Contractor shall exercise the utmost care so as to not endanger life or property, including new work. The Contractor shall be responsible for all damage resulting from the use of explosives. The Contractor shall comply with all local, state and federal laws, ordinances, safety codes and OSHA regulations relative to the handling, storage, and use of explosives. All blasting operations shall be under the direct supervision of a duly licensed person. The Contractor shall be responsible for notifying all parties affected by blasting operations.

1.08 UTILITY COORDINATION

- A. The Contractor shall endeavor to best coordinate the utility disruptions with the impacted businesses and residents of the project area. The interruptions allowed by paragraph 01040.1.08.B below may, with the approval of the Owner's Representative, be altered by the Contractor to facilitate progress and minimize overall impact to the businesses and residents. All impacted businesses and residents must be advised in advance of this change.
- B. The Contractor shall maintain utility services (including water, gas, sewer, cable, electric, and telephone) to all abutting property and current land users. Any interruptions and the duration of the interruption shall be approved by the Owner's Representative a minimum of (5) five days prior to interruption.. The Contractor shall be responsible for coordination with all utility companies concerned, regarding utility re-location or modifications and power hookup.
- C. If water or utility services are unintentionally interrupted, the Contractor shall promptly notify the Owner's Representative and shall cooperate in the restoration of service. Repair work shall be continuous until the service is restored.
- D. The size and location of underground utilities, as noted on the plans, is from the best information available as established from actual field observations and study of existing records. The utilities are noted for the information of the bidders and are believed to be correct; however, the Contractor must take sole responsibility for damage to any utility line encountered, whether or not located on the plans.
- E. Contractor shall coordinate all disruptions in all utilities with the all utility companies, all City of Steamboat Springs departments, emergency service entities including the Fire Department, Police Department, alarm companies, and effected businesses and residents. Work shall not be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.
- F. If utility facilities or appurtenances are found that are neither identified in the Contract, nor revealed by site investigation, the Project Engineer will determine whether adjustment or relocation of the utility is necessary. The Project Engineer will make arrangements with either the utility owner or the Contractor to accomplish necessary adjustments or relocations when not otherwise provided for in the Contract. Extra work payment and / or delays will be considered in accordance with 01035 - Modification Procedures.
- G. The Contractor shall not enter upon private property for any purpose without first obtaining permission, and he shall be responsible for the preservation of all public and private property, trees, fences, monuments, underground structures, etc., on and adjacent to the site and shall use every precaution necessary to prevent damage or injury thereto. He shall protect carefully, from disturbance or damage, all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location, and shall not remove them until directed. He shall be responsible for all damage or injury to property or any character resulting from any act, omission, neglect or misconduct in his or any subcontractor's manner, or method of executing said Work, or due to his or any subcontractor's non-execution of said work, or any time due to defective Work or materials, and said responsibility shall not be released until the Work has been completed and accepted. The Contractor's attention is directed to the importance of protecting all public utilities encountered on the Project. These may include telephone, telegraph and power lines, water lines, sewer lines, gas lines, and other overhead and underground utilities. Before any excavation is begun in the vicinity of water lines, railroad tracks or structures, sewer lines, gas lines, or telephone conduits, each utility company concerned must be notified in advance of such excavation, and such excavation shall not be made until an authorized representative of the utility company concerned is on the ground and has designated the location of their facilities. When or where any direct or indirect damage or injury is done to public or private property by or on account

H. The Contractor shall coordinate all utility work with the respective utility companies.

Providers include:

Atmos Energy
Clay Russell
Richard.Russell@atmosenergy.com
(970) 879-3223 (Office)
(970) 846-1505 (Cell)

Comcast
Robert Kortum
Robert_Kortum@cable.comcast.com
(970) 870-6225 (Office)

Mount Werner Water
Richard Buccino
rbuccino@mwwater.com
(970) 879-2424 (Office)
(970) 819-4647 (Cell)

City of Steamboat Springs Water
Jim Caulkins

(970) 879-2060 (office)
(970) 819.9128

Qwest
Chad Henkel
Chad.Henkel@qwest.com
(970) 879-3661 (Office)

Yampa Valley Elec. Association
Larry Ball
lball@yvea.com
(970) 871-2282 (Office)

PART 2 PRODUCTS (Not applicable)

PART 3 EXECUTION

3.01 GENERAL INSTALLATION PROCEDURES:

- A. The Contractor shall require the subcontractor of each major component to inspect, with the accompaniment of the Contractor and Project Engineer, both the substrate and conditions under which work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items. Re-check measurements and dimensions before starting each installation.
- C. Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.
- D. Installation:
 - 1. Provide attachment and connection devices and methods necessary for securing work. Secure work true to line and level. Allow for expansion and building movement.
 - 2. Install each component during weather conditions and the Work status that will ensure the best possible results for quality and project schedule. Isolate each part of the completed construction from incompatible materials as necessary to prevent deterioration.
 - 3. Coordinate work with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- E. Visual Effects: Provide uniform joint widths in exposed work. Arrange joints in exposed work to obtain the best visual effect. Refer questionable choices to the Project Engineer for final decision.
- F. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated and with the City of Steamboat Springs codes. Refer questionable mounting height decisions to the Project Engineer for final decision.
- G. As-Built Drawings: Contractor shall maintain on a weekly basis, drawings and specifications for all disciplines of Work that depict the details of all Work on the Project. Drawings shall be marked in red pencil with any sketches attached, each with date of modification. This As-Built set shall be kept at the Project Site office and become the basis for the Record Documents. The final Record Documents shall be in CADD format acceptable to the Owner, and also provide a reproducible hard copy. As-Built shall also conform to the requirements of the affected utility companies.

3.02 CLEANING AND PROTECTION:

- A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration prior to achieving substantial completion.

- B. Clean and maintain completed construction as frequently as necessary through the remainder of the Regular Construction Activity period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. The Contractor shall confine operations at the project site permitted by law, ordinances, permits, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

3.03 OPERATIONS AND MAINTENANCE PROCEDURES:

- A. The Contractor shall provide all documentation of all operations and maintenance of installed systems.
- B. For all electrical and mechanical installations in the Work, Contractor shall coordinate and provide all operations and maintenance training to the applicable staff members and designees of the City of Steamboat Springs.

END OF SECTION

**SECTION 01045
ENGINEERING SERVICES FOR PUBLIC INFRASTRUCTURE**

PART 1 GENERAL

1.01 RELATED DOCUMENTS: The General Contract Conditions, Drawings, and other Division 1 Specification sections apply to this section. Refer to the City Engineering Standards for additional information and an outline of the process for acceptance of public improvements.

1.02 DESCRIPTION: This specification outlines the minimum level of construction engineering services, to be provided by a project Owner for public infrastructure that will be accepted by the City; such as public roads or private infrastructure that is on City property that will be approved by the City, and for public and private storm water quality and detention facilities.

- A. Definitions;** For the purpose of this section Public infrastructure is infrastructure that will be owned and maintained by the City or infrastructure on City property. Note that prior to becoming public, public infrastructure must be accepted by the City following the acceptance process detailed in the City Code and City Engineering standards. For the purpose of this section “Engineer” where not preceded by a descriptor such as City, Testing, or Project shall refer to the Testing Engineer or the Project Engineer as applicable.

1.03 RELATED WORK:

- A.** Section 01040 Coordination
- B.** Section 01300 Submittals
- C.** Section 01050 Construction Surveying

PART 2 PRODUCTS:

2.01 IMPROVEMENTS SUMMARY LETTER - TESTING: Testing engineering services provided shall be documented in an Improvements Summary Letter prepared in accordance with the City’s Engineering standards. The Infrastructure Summary Letter – Testing for subgrade and base courses shall be submitted for City Engineer review and approval prior to paving. The Infrastructure Summary Letter - Testing for the other required items shall be submitted for City Engineer review and approval upon completion of the work.

2.02 IMPROVEMENTS SUMMARY LETTER – ENGINEERING: Construction engineering services shall be documented in an Improvements Summary Letter – Engineering prepared in accordance with the City’s Engineering Standards. The Infrastructure Summary Letter – Engineering shall be submitted for City Engineer review and approval upon completion of the work.

2.03 RECORD DRAWINGS. Where required by the Engineering standards, record drawings shall be provided.

PART 3 EXECUTION:

3.01 QUALIFICATIONS OF PROJECT OBSERVATION PERSONNEL: The individual(s) conducting Engineering Services shall be a professional civil engineer registered in the State of Colorado or a properly trained engineer or technician who is under the direct supervision of a licensed professional engineer. The on-site personnel shall be experienced in construction observation of the infrastructure being installed.

3.02 CONSTRUCTION OBSERVATION: The construction engineering work items listed are intended to be the minimum guidelines to which the owner shall comply. The actual level of construction engineering shall be that required to assure conformance with the standards, approved plans, and specifications. The

minimum level of engineering services necessary for providing an opinion of substantial conformance on public infrastructure projects shall be as follows:

A. Public Roads

- 1. Pre-Construction Survey Review:** Project Engineer shall visually verify that the limits of right of way, appropriate easements, and road centerline pvi, and pvt are staked and per plans and specifications prior to commencement of road construction.
- 2. Testing Firm Construction Observation**
 - a)** Observe, perform testing, and document that all road materials meet approved plans and specifications.
 - b)** Observe, perform testing, and document the subgrade preparation, and placement of road structure (sub base, road base, pavement, etc) meet the approved plans and specifications. Summary of subgrade and road base to be submitted for approval by City Engineer prior to paving.
 - c)** Observe, perform testing and document backfill for utility trenching in roadways (testing per appropriate Utility specifications) and observe and document replacement of road structure meets the approved plans and specifications.
 - d)** Review and observe proof roll of completed base course in conjunction with City Engineer and Project Engineer.
 - e)** Observe, perform testing, and document materials and placement of fills in ROW and adjacent construction easements are per the approved plans and specifications.
 - f)** Observe, perform testing, and document footings and retaining walls in the ROW or in the influence area of the ROW are per the approved plans and specifications.
 - g)** Identify any field conditions observed that may compromise the roadway, ROW, or adjacent public easements.
 - h)** Observe, perform testing, and document any other items as required in the Special Provisions.
- 3. Project Engineer Construction Observation**
 - a)** Prior to paving, conduct survey to observe and document “blue top” centerline staking to verify road alignment and grades are per plan and road is centered within ROW (unless otherwise shown on the approved plans.). Any noted variances shall be documented along with any corrective action taken and provided to the City Engineer for approval prior to paving.
 - b)** Observe and document proof roll of completed base course in conjunction with City Engineer and Testing Engineer.
 - c)** Observe and document that grade and location of fills in ROW and adjacent construction easements are in general conformance with the approved plans and specifications.
 - d)** Observe and document that the layout of the complete road cross-section within the ROW (road; ditch, valley pan, or curbing; sidewalk; transit facilities; bike lanes; landscape buffer; lighting, street trees; street features, grading; etc) is constructed per the approved plans and specifications.

- e) Observe and document that the following is constructed per the approved plans and specifications by visual observation and other methods as appropriate:
 - i) Road surface
 - ii) Corner radii
 - iii) Traffic control including Signals, Signing, and Striping
 - iv) Guard rails and traffic cushions
 - v) Retaining walls

B. Public Storm Water Systems

- 1. Testing Engineer Construction Observation
 - a) Observe test, and document the placement of backfill over storm water pipe and around manholes and inlets is per approved plans and specifications.
- 2. Project Engineer Construction Observation
 - a) Observe and document the material, alignment, cross-sections, check dams, and grades of roadside ditches are per the approved plans and specifications.
 - b) Observe and document that the following is constructed per the approved plans and specifications and is operational:
 - i) Size, type, and layout of storm sewer
 - ii) Size, type, and layout of inlet, catch basin, trench grates, chases, or manhole
 - iii) Inlet/Outlet protection
 - iv) Energy dissipation
 - v) End sections
 - c) Observe and document that the storm water quality and storm water detention facilities are constructed per plans and specifications and is operational including:
 - i) Pond or storm water quality feature size
 - ii) Outlet size and elevation
 - iii) Orifice size and number
 - iv) Spillway configuration and elevation
 - v) All design components were properly installed (example sand layer, topsoil, and vegetation for porous landscape pond)
 - vi) Access for maintenance is provided

C. Public Sidewalks and Trails

- 1. Testing Engineer Construction Observation:
 - a) Observe, perform testing, and document that sidewalk and trail materials meet approved plans and specifications.
 - b) Observe, perform testing, and document that the subgrade preparation, placement of road base, and placement of concrete or crusher fines are per the approved plans and specifications.
- 2. Project Engineer Construction Observation
 - a) Observe and document the subgrade prior to sidewalk construction to evaluate that grade and alignment are per approved plans and specifications and that the walk or trail is within the ROW or easements.
 - b) Prior to paving, observe and document the installation of dowels and rebar where required.
 - c) Observe and document that the following is constructed per the approved plans and specifications:
 - i) Cross-section
 - ii) Finish

- iii) Cross slope
- iv) Grade
- v) Backfill
- vi) Joint construction and location
- vii) ADA ramps and detectable warnings
- viii) Traffic Control: signs, striping, and signals

- D. Storm water Quality and Detention (Public or Private)
 - 1. Testing Engineer Construction Observation – none required.
 - 2. Project Engineer Construction Observation
 - a) Verify that the storm water quality and storm water detention facilities are constructed per plans and specifications and is operational including:
 - i) Pond or storm water quality feature size
 - ii) Outlet size and elevation
 - iii) Orifice size
 - iv) Spillway configuration and elevation
 - v) All Design components were properly installed (example sand layer, topsoil, and vegetation for porous landscape pond)

3.03 Daily Observation Logs: The Engineer shall keep a log of daily site observations. The Engineer shall make entries to note any conditions that will be of assistance to the City after construction is complete and assure the City that the Engineer has performed the necessary service to support the request for acceptance.

- A. The Engineer shall submit copies of all of the logs to the City Engineer.
- B. Typical entries shall include:
 - 1. As-constructed dimensions.
 - 2. Alteration of plans, character or work and quantities.
 - 3. Use of materials found in the excavation.
 - 4. Any decisions on interpretation given the Contractor.
 - 5. Quality control test results indicating: conditions rework, retests, indicating any observed variances to the requirements of the approved plans or specifications.
 - 6. Summary of Work completed during observation
 - 7. Weather and any other conditions that effect construction requirements or procedures.
 - 8. Personnel involved.
 - 9. Time the Engineer was on site.
- C. Substantial Change from Plans and Specifications: Project Engineer shall notify City Engineer of substantial changes from plans and specifications. This notification shall be made upon discovery of the changed conditions and prior to construction of any substantial modification from the plans.
- D. Summary Report. The Engineer shall submit a summary report as required by the City's Engineering Standards.
- E. Statement by the Engineer.
 - a) The Testing Engineer and Project Engineer responsible for the project must both submit a statement that the work they evaluated was completed in substantial conformance with the approved plans and specifications, based on the observations made by him or the engineering technician performing work under his direct supervision.
 - b) The statement must be submitted per the requirements of the Improvements Summary Letter identified in the Engineering standards.

**SECTION 01050
CONSTRUCTION SURVEYING**

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section. The Colorado Department of Transportation Standard Specification Section 625 applies as indicated below.

1.02 DESCRIPTION: Section includes general requirements and procedures for construction surveying.

1.03 RELATED WORK:

- A. Section 02200 – Earthwork
- B. Division 2 - Layout of site improvements, reference affected sections

1.04 EXISTING UTILITIES:

- A. The existence and location of underground utilities and construction indicated as existing are not guaranteed.
- B. Before starting any work disturbing, moving or penetrating the ground, the Contractor must have all existing utilities located and staked by the appropriate entity.

1.05 BASE SURVEY: The Project Engineer will provide base datum, for the use by the Contractor for reference, and digital files of all plan sheets and base file information.

PART 2 PRODUCTS

PART 3 - EXECUTION

3.01 CONSTRUCTION SURVEYING:

- A. General: The work shall consist of the office preparation, construction surveying, calculating, drafting, and staking necessary for the construction of all elements of the project. Layout of site elements will be accomplished either by means of coordinates or traditional baseline method or a combination of both.
- B. The work shall be done under the supervision of a Professional Land Surveyor (P.L.S.) who is experienced and competent in site construction surveying and registered in the State of Colorado. Referencing, setting and restoring land monuments and the determination of property lines shall be done in accordance with Section 629 of the CDOT specifications. The P.L.S. shall be available to review work, resolve problems and make decisions in a timely manner.
- C. The Contractor shall furnish all personnel, materials, traffic control, and incidentals necessary to perform the required construction surveying. All surveying equipment, including Electronic Distance Meters, tapes, tribrachs, theodolites, total stations, GPS receivers and levels shall be calibrated prior to the start of work. EDM's, total stations, and GPS receivers shall be checked on a National Oceanic and Atmospheric Administration (NOAA) calibrated baseline. Equipment calibration accuracy and adjustments made to meet requirements specified in the

- D. Contractor shall establish horizontal and vertical control for the project. A Pre-survey Conference shall be held prior to performing any surveying work. The Project Engineer, Contractor's Superintendent, and Contractor's Surveyor (P.L.S.) shall attend. A surveying work schedule shall be submitted to the Project Engineer for review prior to the conference.
- E. Contractor shall check all Owner-established control points, and verify and document their accuracy, prior to using them for construction surveying control. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for replacement or relocation of such reference points by professionally qualified personnel.
- F. Contractor shall perform all construction surveying and staking that is necessary for construction of the project.
 - 1. Prior to the start of the project, Contractor shall confirm with the City Engineer and Project Engineer if as-builts will be required for the project. If there are significant changes from the approved plans during construction, City Engineer may require as-builts prior to City acceptance.
 - 2. The Contractor shall provide all construction surveying for line and grade.
 - 3. Working from lines and levels established by the property survey, establish and maintain benchmarks and other dependable markers to set the lines and levels for the work and elsewhere on the site as needed to properly locate every element of the Work.
 - 4. As construction proceeds, check every major element for line, level and plumb.
 - 5. Calculate and measure required dimensions as shown within recognized tolerances. Do not scale the Drawings to determine dimensions. Advise entities engaged in construction activities of the marked lines and levels provided for use.
 - 6. The Contractor is to establish all necessary benchmarks on site for layout and grading based on the control points shown on the plans.
 - 7. Contractor shall stake the ROW limits, appropriate easements, and then the centerline, PVI, and PVT of roadways.
 - 8. Upon completion of roadbase installation and prior to paving, Contractor shall stake the ROW limits, appropriate easements, and the centerline of public roadways for Project Engineer and City Engineer inspection.
 - 9. Upon completion of roadbase installation and prior to paving, Contractor shall survey the centerline grade of public roadway segments that are greater than seven percent for Project Engineer and City engineer inspection.
- G. Site Improvements: Locate and lay out site improvements, including pavements, stakes for grading, fill and topsoil placement, utility line gradients and elevations, invert, detention ponds and structures, and other features by instrumentation and similar appropriate means.

H. Layout Procedures:

1. Verify layout information shown on the Drawings in relation to the property survey and existing benchmarks, before proceeding with the layout of the actual work. Locate and protect existing benchmarks and control points. Preserve identified permanent reference points during construction.
 2. Do not change or relocate benchmarks or control points without prior written approval. Promptly report lost or destroyed reference points, or requirements to relocate reference points because of necessary changes in grades or locations.
 3. Promptly replace lost or destroyed project control points. Base replacements on the original survey control points.
 4. Establish and maintain a minimum of two temporary benchmarks on the site, reference to data established by survey control points.
- I. Staking: Acceptable staking placement intervals for the various construction survey control operations shall be reviewed by the Project Engineer prior to the beginning of work. Stationing shall be established in the field on centerline or an approved offset.
- J. Accuracy and Tolerances: Accuracy of surveys and survey tolerances shall be as specified in the Contract or the CDOT Survey Manual. If a discrepancy should occur, the higher degree of accuracy or the more restrictive tolerance shall apply.
- K. Responsibility and Inspection: Supervision and coordination of construction surveying is the Contractor's responsibility. The Project Engineer may inspect the Contractor's surveying; however, such inspection will not relieve the Contractor of any responsibility for accuracy or completeness of work. The Contractor shall check the work to verify the accuracy and include documentation of this check in the Survey Records. All Contractor surveying inaccuracies, errors or omissions shall be corrected at the Contractor's expense. Project Engineer's inspection or the Contractor's corrections shall not entitle the Contractor to additional payment or contract time extension.
- L. Changes: All changes in lines and grades required by field conditions and all discrepancies in grades, alignment, location or dimensions detected by the Contractor shall be immediately submitted to the Project Engineer in writing. No changes in given data or plans will be allowed unless approved by the Project Engineer in writing. All changes shall be documented in the survey records.

3.02 GRADE AND ALIGNMENT CONFIRMATION SURVEYING:

1. Once roads to be designated as public City streets have the subgrade graded and compacted to requirements and prior placement of base course, Owner shall provide a third party surveyor to set grade finishing stakes (blue tops) to allow the project engineer to visually confirm the grade elevations and horizontal alignment are per the approved plans.
2. The blue top stakes shall be set on the roadway centerline and at each shoulder at the top of the subgrade.
3. The blue top grade stakes shall be set at station intervals consistent with the plans not to exceed 100 feet on tangents and 50 feet on horizontal or vertical curves.

END OF SECTION

**SECTION 01105
ADMINISTRATION, PROCEDURES, AND CODES**

PART 1 GENERAL

1.01 RELATED DOCUMENTS: The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.

1.02 DESCRIPTION: Section includes general administrative requirements and procedures, and related applicable codes

1.03 ADMINISTRATION – OWNER

A. The Owner shall designate in writing an Owner's Representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in these General Conditions, Owner will issue all communications to Contractor through the Owner's Representative. The term "Owner" means the Owner or the Owner's Representative or the Owner's Representative.

B. The Owner's Representative, architects, engineers, consultants, and artists make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. The Owner's Representative will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. Owner's Representative efforts will be directed toward providing the Owner a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, Owner's Representative will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defects and deficiencies in the Work.

1. Owner's Representative will have authority to disapprove or reject Work which is defective, and will also have authority to require special inspection or testing of the Work whether or not the Work is fabricated, installed or completed.

2. Owner's Representative will not be responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and Owner's Representative will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

3. Owner, Owner's Representative, Architect, and Project Engineer, or consultants shall have no responsibility or liability for Project safety or compliance with any rules, regulations or ordinances governing safety, safety equipment or safety precautions on the Project for anyone other than the employees of the Owner or its consultants.

4. Neither Owner's Representative nor Owner will be responsible for the acts or omissions of Contractor or of any Subcontractors, or of the agents or employees of any Contractor or Subcontractor, or of any other persons at the site or otherwise performing any of the Work.

5. The Owner's Representative shall promptly make decisions relative to interpretation of the contract documents.

6. Neither Owner's Representative's authority to act under this section or elsewhere in the contract documents, nor any decision made by Owner's Representative in good faith either to exercise or not exercise such authority, shall give rise to any duty or responsibility of Owner's Representative to Contractor, any subcontractor, any supplier, or any other person or organization performing any of the work, or to any surety for any of them.

7. The Owner shall have the right to enter the premises for the purpose of doing work not covered by the contract documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the work, or the restoration of any damaged work, except such as may be caused by agents or employees of the Owner.
- C. **OWNER'S RIGHT TO STOP WORK:** If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents or persistently fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated. However, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by the Contract Documents.
- D. **OWNER'S RIGHT TO CARRY OUT THE WORK:** If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period give the Contractor a second written notice to correct such deficiencies within a three-day period. If the Contractor within such three-day period after receipt of such second notice fails to commence and continue to correct any deficiencies, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's or Owner's Representative's additional services made necessary by such default, neglect or failure. If payments due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.
- E. **OWNER'S RIGHT TO PERFORM WORK:** Owner may perform additional work related to the Project by himself, or have additional work performed by utility service companies or other contractors, or let other direct contracts therefore which shall contain General Conditions similar to these. Contractor shall afford the utility service companies and the other contractors who are parties to such direct contracts (or Owner, if Owner is performing the additional work with Owner's employees) reasonable opportunity for the introduction and storage of materials and equipment and the execution of Work, and shall properly connect and coordinate his Work with theirs, and shall conduct his operations as to minimize the interference with theirs, as directed by Owner's Representative. The Contractor shall conduct his operations and cooperate with the other parties so as to minimize interference with this other work. Should a difference arise as to the rights of the Contractor and the other, the Owner's Representative, shall be the sole mediator and his decision shall be final and binding on the Contractor.
1. If any part of Contractor's Work depends on proper execution or results upon the work of any such Owner, other contractor, or utility service company Contractor shall inspect and promptly report to Owner's Representative in writing any patent or apparent defects or deficiencies in such work that render it unsuitable for such proper execution and results. Contractor's failure so to report shall constitute an acceptance of the other work as fit and proper for integration with Contractor's Work except for latent or non-apparent defects and deficiencies in the other work. Such acceptance by Contractor shall render him responsible for subsequent correction of any such work.
 2. Contractor shall do all cutting, fitting and patching of his Work that may be required to make its several parts come together properly and integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of Owner's Representative and the others whose work will be affected. \

3. If the performance of additional work by Owner, other contractors, or utility service companies was not noted in the Contract Documents, written notice thereof shall be given to Contractor prior to starting any such additional work. If the performance of such additional work not noted in the Contract Documents causes unavoidable additional expense to Contractor or causes unavoidable delay in the Contractor's prosecution of the Work, Contractor may make a claim therefore as provided in the General Conditions.
 4. If a dispute arises among the Contractor, separate contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and may back charge proportionate costs to each of the involved parties. Further remedies are the procedures for resolution of Disputes and Claims below.
- F. OWNER'S RIGHT TO CHANGE WORK: The Owner may order changes to the Work without invalidating the Agreement. Change procedures are described in Section 01035.
- G. SUSPENSION OF WORK, TERMINATION, AND DELAY
1. The Owner may suspend the work or any portion thereof for a period of not more than ninety (90) days or such further time as agreed upon by the Contractor, by written notice to the Contractor and the Owner's Representative which notice shall fix the date on which work shall be resumed. The Contractor will resume that work on the date so fixed. The Contractor will be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to any suspension.
 2. If the Contractor is adjudged a bankrupt or insolvent; or if he makes a general assignment for the benefit of his creditors; or if a trustee or receiver is appointed for the Contractor or for any of his property; or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws; or he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment; or if he repeatedly fails to make prompt payments to subcontractors or for labor, materials or equipment; or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the work; or if he disregards the authority of the Owner's Representative; or if he otherwise violates any provision of the contract documents; then the Owner may, without prejudice to any other right or remedy and after giving the Contractor and his surety a minimum of ten (10) days from delivery of a written notice, terminate the services of the Contractor and take possession of the project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor, and finish the work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the project, including compensation for additional professional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor will pay the difference to the Owner. Such costs incurred by the Owner will be determined by the Owner's Representative and incorporated in a change order
 3. Where the Contractor's services have been so terminated by the Owner, said termination shall not affect any right of the Owner against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the Owner due the Contractor will not release the Contractor from compliance with the contract documents.
 4. After ten (10) days from delivery of a written notice to the Contractor and the Owner's Representative, the Owner may, without cause and without prejudice to any other right or remedy, elect to abandon the project and terminate the contract. In such case, the

5. If, through no act or fault of the Contractor, the work is suspended for a period of more than ninety (90) days by the Owner or under an order of court of other public authority, or the Owner's Representative fails to act on any request for payment within thirty (30) days after it is submitted, or the Owner fails to pay the Contractor substantially the sum approved by the Owner's Representative or awarded by arbitrators within (30) days of its approval and presentation, then the Contractor may after ten (10) days from delivery of a written notice to the Owner and the Owner's Representative, terminate the contract and recover from the Owner payment for all work executed and all expenses sustained. In addition and in lieu of terminating the contract, if the Owner's Representative has failed to act on a request for payment or if the Owner had failed to make any payment as foresaid, the Contractor may upon ten (10) days written notice to the Owner and the Owner's Representative stop the work until he has been paid all amounts then due, and change orders shall be issued for adjusting the contract price or extending the contract time or both to compensate for the costs and delays attributable to the stoppage of work.
6. If the performance of all or any portion of the work is suspended, delayed or interrupted as a result of a failure of the Owner or Owner's Representative to act within the time specified in the contract documents, or if no time is specified, within a reasonable time, an adjustment in the contract price or an extension of the contract time or both, shall be made by change order to compensate the Contractor for the costs and delays necessarily caused by the failure of the Owner or Owner's Representative.

1.04 ADMINISTRATION – CONTRACTOR

- A. The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term means the Contractor or the Contractor's authorized representative.
- B. Contractor shall employ at all times during its work progress a competent resident superintendent, who shall not be replaced without written notice to Owner's Representative except under extraordinary circumstances. Such superintendent shall be capable of reading and thoroughly understanding the Plans and Specifications and shall be able to communicate with the Owner's Representative. The superintendent shall have full authority to execute the Work specified in the Contract Documents without delay and promptly to supply materials, tools, plant equipment and labor as may be required to perform such Work. Such superintendent shall be furnished irrespective of the amount of Work sublet. The superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given the superintendent shall be as binding as if given to Contractor. If such an individual is not present, the Project may be shut down.
- C. The Contractor shall perform the Work in accordance with the Contract Documents. The Contractor will be held strictly to the intent of the contract documents in regard to the quality of materials, workmanship and execution of the work. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner's Representative, Architect, or Engineer administration of the Contract or by tests, inspections or approvals required or performed by persons other than the Contractor. The Contractor will be held strictly to the intent of the contract documents in regard to the quality of materials, workmanship and execution of the work.
- D. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions.

- E. Contractor shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the Work. The Contractor shall furnish such equipment as is considered necessary for the prosecution of the Work in an acceptable manner and at a satisfactory rate of progress. All equipment, tools, and machinery used for handling materials and executing any part of the Work shall be subject to the approval of the Owner's Representative and shall be maintained in a satisfactory working condition. Equipment used on any portion of the Work shall be such that no damage to the Work, roadways, adjacent property, or other objects will result from its use. The Agreement may be terminated if the Contractor fails to provide adequate resources for the Work.
- F. The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors.
- G. Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents.
- H. Contractor is an independent Contractor and nothing herein contained shall constitute or designate the Contractor or any of its employees or agents as employees of the Owner. Contractor acknowledges that it has no contractual, tort, or other legal relationship of any type with the Owner's Representative or Architect and the Owner's Representative and Architect owe no duty of any kind to it.
- I. Private Property. The Contractor shall not enter upon private property for any purpose without first obtaining permission, and the Contractor shall be responsible for the preservation of all public and private property, trees, fences, monuments, underground structures, etc., on and adjacent to the site and shall use every precaution necessary to prevent damage or injury thereto. All public and private property shall be protected from damage. Property damaged by the Contractor during the construction of the work shall be, at the Contractor's expense, repaired or replaced and left in as good condition as found.
- J. The Contractor shall be responsible for repairing damage to Work under this contract including vandalism and theft.
- K. Subcontracting
 - 1. The Contractor may utilize the services of specialty subcontractors on those parts of the work, which, under normal contracting practices, are performed by specialty subcontractors.
 - 2. The Contractor shall not award work to subcontractor(s) in excess of seventy (70) percent of the contract price without prior written approval of the Owner.
 - 3. The Contractor shall be fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is responsible for the acts and omissions of persons directly employed by him.
 - 4. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the contract documents.

5. Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.
6. The Contractor shall not employ any subcontractor or other person or organization (including those who are to furnish the principal items of materials or equipment), whether initially or as a substitute, against whom Owner and Owner's Representative may have reasonable objection. A subcontractor or other person or organization identified in writing to Owner and Owner's Representative by Contractor prior to the notice of award and not objected to in writing by Owner or Owner's Representative prior to notice of award will be deemed acceptable to Owner and Owner's Representative. Acceptance of any subcontractor, other person or organization by Owner or Owner's Representative shall not constitute a waiver of any right of Owner or Owner's Representative to reject defective work. If Owner or Owner's Representative, after due investigation, has reasonable objection to any subcontractor, other person or organization proposed by Contractor, other person or organization proposed by Contractor after notice of award, Contractor shall submit an acceptable substitute. Contractor shall not be required to employ any subcontractor, other person, or organization against whom Contractor has reasonable objection.
- L. The Contractor shall enforce strict discipline and good order among the Contractor's employees, subcontractors, suppliers and other persons performing Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. Catcalling or harassment of any persons in or adjacent to the Project by the Contractor's workforce including all subcontractors and suppliers will not be tolerated. Any incidents shall result in immediate dismissal of individual(s) involved and repeated incidents may result in Contractor or subcontractor dismissal.

1.05 INDEMNIFICATION

- A. Contractor shall defend, indemnify, and hold the Owner, Owner's Representative, Engineer, Architect, consultants, and utility companies harmless for any losses, expenses including attorney's fees arising out of or resulting from the performance of the work provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom including alleged delay, interruption, acceleration or supervision of the work or schedule; and is caused in whole or in part by any negligent or willful act or omission of the contractor and the subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- B. In any and all claims against the owner or the engineer, or any of their agents or employees, by any employee of the contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount of type of damages, compensation or benefits payable by or for the contractor or any subcontractor under workmen's compensation acts, disability benefit acts or other employee benefits acts.
- C. The obligation of the contractor under this paragraph shall not extend to the liability of the engineer, his agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications.

1.06 DISPUTES, CLAIMS, ARBITRATION

- A. Owner's Representative will be the initial interpreter of the requirements of contract documents and judge of the acceptability of the work hereunder. Claims, disputes, and other matters relating to the acceptability of the work, or the interpretation of the requirements of the contract documents pertaining to the performance and furnishing of the work, and claims under section 01035 Modification Procedures in respect of changes in the contract price and

- B. When functioning as interpreter and judge under sections 01105 1.03B and 01105 1.05A, Owner's Representative will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by Owner's Representative pursuant to paragraphs sections 01105 1.03B and 01105 1.05A with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in section 01025 1.01I) will be a condition precedent to any exercise by Owner or Contractor of such rights or remedies as either may otherwise have under the contract documents or by laws or regulations in respect of any such claim, dispute, or other matter.
- C. All claims, disputes and other matters in question between Owner and Contractor arising out of, or relating to the contract documents, or the breach thereof (except for claims which have been waived by the making or acceptance of final payment as provided by section 01025 1.01I) will be decided by Colorado law; or, if specifically agreed to in writing by the Owner and Contractor, by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining subject to the limitations of this section. Any agreement so to arbitrate and any other agreement or consent to arbitrate entered and any other agreement or consent to arbitrate entered into accordance herewith as provided in this article 30 will be specifically enforceable under the prevailing law of any court having jurisdiction.
- D. Pending final resolution of a claim except as otherwise provide in writing, the Contractor shall proceed diligently with performance of the Work and the Owner shall continue to make payments in accordance with the Contract Documents.
- E. Injury or Damage to Person or Property. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

1.07 INSPECTIONS AND TESTING

- A. All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the contract documents.
- B. The Owner shall provide all inspection and testing services not required by the contract documents.
- C. The Contractor shall provide at his expense the testing and inspection services required by the contract documents. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner's Representative.
- D. If the contract documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to specifically be inspected, tested or approved

- E. Inspections, tests or approvals by the Owner's Representative or other shall not relieve the Contractor from his obligations to perform the work in accordance with the requirements of the contract documents.
 - F. The Owner's Representative and his representatives will at all times have access to the work. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.
 - G. If any work is covered contrary to the written instructions of the Owner's Representative, it must, if requested by the Owner's Representative, be uncovered for his observation and replaced at the Contractor's expense.
 - H. If such procedures for testing, inspection or approval under this section above, reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Owner's Representative services and expenses shall be at the Contractor's expense.
- 1.08 UNCOVERING OF WORK : If the Owner's Representative considers it necessary or advisable that covered work be inspected or tested by others, the Contractor, at the Owner's Representative's request, will uncover, expose or otherwise make available for observation, inspection or testing--as the Owner's Representative may require--that portion of the work in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such work is defective, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such work is not found to be defective, the Contractor will be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction, and an appropriate change order shall be issued.
- 1.09 CORRECTION OF WORK
- A. Before or After Substantial Completion of the Work : The Contractor shall promptly correct Work rejected by the Owner's Representative or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections and compensation for the Owner's Representative services and expenses made necessary thereby, shall be at the Contractor's expense.
 - B. After Substantial Completion
 - 1. In addition to the Contractor's obligations under Warranties, if, within one year after date of Substantial Completion of the Work or designated portion thereof or after the date commencement of warranties, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner will give such notice promptly after discovery of the condition. During the one year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice

2. The one year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work.
 3. The one year period for correction of Work shall be extended by corrective Work performed by the Contractor.
- C. The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
 - D. The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate Contractors caused by the Contractor's correction or removal of Work which is not in with the requirements of the Contract Documents.
 - E. Nothing contained in this Paragraph on Correction of Work shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the one year period for correction of work as described in this Section relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the other than specifically to correct the Work.
 - F. Acceptance of Nonconforming Work: If the Owner prefers to accept Work which is not in accordance with the Requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Amount will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

1.10 CODES, COMPLIANCES, AND NOTICES

- A. The Contractor shall obtain all permits, inspections, approvals, and certificates required by law. The Contractor shall conform to all laws, ordinances, rules and regulations applicable to the location of the Work. The Contractor shall secure and pay for permits, governmental fees, licenses and inspections as necessary for proper execution of the Contract and which are legally required when bids are received or negotiations concluded..
- B. The Contractor shall comply with codes and standards in effect at the date of the Contract Documents, except where a standard or a specific date or edition is indicated.
- C. Obtaining of all permits, inspections, approvals, and certificates shall be coordinated with the schedule so as to not delay the Work. The Contractor shall identify to the Owner any such permits, inspections, approvals, and certificates that may have cause to delay the work prior to commencement of construction.
- D. The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities applicable to the Work.
- E. It is not the Contractor's responsibility to ascertain that the Contract Documents conform to applicable laws, statutes, ordinances, building codes, rules, and regulations, however, if the Contractor observes that any of the Contract Documents are in variance, the Contractor shall promptly notify the Owner's Representative.

- F. If the Contractor performs any of the Work knowing it to be contrary to applicable laws, statutes, ordinances, building codes, rules, and regulations without notice to the Owner's Representative, the Contractor shall be held appropriate responsibility for such work and shall bear the costs attributable to correction.
- G. The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for the infringement of copyrights and patent rights and shall hold the Owner and its consultants harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or its consultants. However, if the Contractor has reason to believe that the required design, process, or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Owner's Representative.

1.11 TAXES

- A. The contractor will pay all sales, consumer, use, and other similar taxes required by the law of the place where the work is performed.
- B. On all work where the Owner is a municipality or other public entity, the Contractor and all subcontractors shall obtain a sales tax exemption number and therefore will not pay sales tax on materials purchased for the project as allowed by Colorado law. The sales tax exemption application form DR172 is available from the Colorado Department of Revenue, Sales Tax Division, 1375 Sherman Street, Denver, Colorado 80261, 866-3767 x 500. The Contractor will not be reimbursed by the Owner for sales tax paid on materials installed as part of the project work.

1.12 LAND AND RIGHTS OF WAY

- A. Prior to issuance of notice to proceed, the Owner shall obtain all land and rights of way necessary for carrying out and for the completion of the work to be performed pursuant to the contract documents, unless otherwise mutually agreed.
- B. The Owner shall provide to the Contractor information which delineates and describes the lands owned and rights of way acquired.
- C. The Contractor shall provide, at his own expense and without liability to the Owner, any additional land and access thereto that the Contractor may desire for temporary construction facilities, or for storage of materials.

1.13 SPECIAL WARRANTIES:

- A. Special warranties are those specified in the Technical Specification Sections, to be provided by a manufacturer or by the Contractor or his subcontractors or combinations thereof. Refer to Section 01785 for submittal of such warranties as a part of the contract completion documentation and procedures.
- B. All such special warranties must conform to the specification requirements and be signed by persons who have the authority to commit the issuing entity to the warranty. Subcontractor issued warranties must be signed by the Subcontractor and the Contractor.
- C. All such special warranties are in addition to and not a limitation of other rights the City of Steamboat Springs may have against the Contractor under the Contract Documents.
- D. All warranties shall name the Steamboat Springs Redevelopment Authority the Owner.
- E. All warranties shall be for a minimum period for 1 year from substantial completion.

1.14 MISCELLANEOUS PROVISIONS

- A. The Agreement shall be governed by the laws of the state of Colorado
- B. Successors and Assigns
 - 1. The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents. Except as provided in paragraph 1.13.B.2. below, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.
 - 2. The Owner may, without consent of the Contractor, assign the Contract to an institutional lender providing construction financing for the Project. In such event, the lender shall assume the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.
- C. Written Notice. Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.
- D. These Specifications are written in the streamlined or declarative style, utilizing incomplete sentences. Omissions of such words and phrases "The Contractor shall," "in conformity therewith," "shall be," "as shown on the Drawings," "a," "an," "the," and "all" are intentional in streamlined sections. Omitted words shall be supplied by inference in the same manner as when a note appears on the Drawings. The omission of such words shall not relieve the Contractor from providing all items and work described herein or indicated on the Drawings.
- E. Rights and Remedies. Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the Owner, Owner's Representative or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.
- F. Commencement of Statutory Limitation Period. As between the Owner and Contractor:
 - 1. Before Substantial Completion. As to acts or failures to act occurring prior to relevant date of Substantial Completion, any applicable statute of limitations commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;
 - 2. Between Substantial Completion and Final Certificate for Payment. As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and
 - 3. After Final Certificate for Payment. As to acts or failures to act occurring after the relevant date of issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action, shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any Warranty provided under the Contract Documents, the date of any correction of the Work or failure to correct the Work by the Contractor under paragraph 1.08 Correction of Work, above, or the date of actual commission of any other act or

PART 2 PRODUCTS (not applicable)

PART 3 EXECUTION (not applicable)

END OF SECTION

SECTION 01110
INSURANCE AND BONDS

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.

1.02 DESCRIPTION: Section includes general requirements for insurance and bonds.

1.03 INSURANCE

- A. The Contractor shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's execution of the work, whether such execution be by himself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

1. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;
3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;
4. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person; and
5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
6. Payment for the costs of insurance and contract security shall be made per the "insurance and contract security" lump sum bid item. If no separate item is provided in the bid, the costs shall be uniformly distributed to other bid items.

- B. Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the work. These certificates shall contain a provision that coverage afforded under the policies will not be canceled unless at least fifteen (15) days prior written notice has been given to the Owner.

- C. The Contractor shall procure and maintain, and shall cause each subcontractor of the Contractor to procure and maintain, the minimum insurance coverages listed below. All coverages shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by the Contractor pursuant to this Agreement. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured by the Contractor to maintain such continuous coverage. The Contractor shall procure and maintain the insurance at his own expense.

1. Worker's Compensation insurance as required by the Labor Code of the State of Colorado and Employers Liability Insurance. Evidence of qualified self-insured status may be substituted. The Contractor shall procure and maintain, at his own expense, during the

2. General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS (\$1,000,000.00) each occurrence and ONE MILLION DOLLARS (\$1,000,000.00) aggregated. The policy shall include the Owner, its officers and its employees, as additional insured, with primary coverage as respects Owner, its officers and its employees, and shall contain a Severability of interests position.
 3. Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) per person in any one occurrence and FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) aggregate for any such damage sustained by two or more persons in any one accident. The policy shall include the Owner, its officers and its employees, as additional insured, with primary coverage as respects the Owner, its officers and its employees, and shall contain a SEVERABILITY of interests provision.
 4. The Contractor shall secure, if applicable, "All Risk" type Builder's Risk Insurance for work to be performed. Unless specifically authorized by the Owner, the amount of such insurance shall not be less than the Contract Amount totaled in the Bid. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind collapse, riot, aircraft, and smoke during the Contract Time, and until the work is accepted by the Owner. The policy shall name as the insured the Contractor, the Engineer, and the Owner.
- D. The Owner, its employees and/or agents shall be named as an additional insured on all insurance policies required in this contract to be furnished by the Contractor or any subcontractor.
 - E. The Contractor shall furnish proof of the same by delivery of a current and valid Certificate of Insurance naming the Owner as additional insured prior to commencement of the Work. A certificate of insurance shall be completed by the Contractor's insurance agent(s) as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be subject to review and approval by the Owner prior to commencement of any services under the contract.
 - F. The parties hereto understand and agree that the Owner is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, 24-10-101 et seq., 10 C.R.S., as from time to time amended, or otherwise available to the Owner its officers, or its employees.
 - G. The Contractor is an independent Contractor and is not entitled to Worker's Compensation benefits and is obligated to pay Federal and State income tax on any moneys earned pursuant to the contract relationship.

1.04 BONDS - CONTRACT SECURITY

- A. The Contractor shall within ten (10) days after the receipt of the notice of award furnish the Owner with a performance bond and a payment bond in penal sums equal to the amount of the contract price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of the contract documents, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by the contract documents. Such bonds shall be executed by the Contractor and a corporate bonding company licensed to transact such business in the state in which the work is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these bonds shall be borne by the Contractor. If at any time a surety on any such bond is declared in which the work is to be performed or is removed from the list of Surety Companies accepted on Federal bonds, Contractor shall within ten (10) days after notice from the Owner to do so, substitute an acceptable bond (or bonds) in such form and sums and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such bond shall be paid by the Contractor. No further payments shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond to the Owner.
- B. Payment for the costs of insurance and contract security shall be made per the "insurance and contract security" lump sum bid item. If no separate item is provided in the bid, the costs shall be uniformly distributed to other bid items.

1.05 INDEMNIFICATION

- A. The Contractor will indemnify and hold harmless the Owner and the Owner's Representative and their agents and employees from and against all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from the performance of the work; provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use resulting there from, and is caused in whole or in part by any negligent or willful act or omission of the Contractor, subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable.
- B. In any and all claims against the Owner or the Owner's Representative, or any of their agents or employees, by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount of type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workmen's compensation acts, disability benefit acts or other employee benefits acts.
- C. The obligation of the Contractor under this paragraph shall not extend to the liability of the Owner's Representative, his agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION

**SECTION 01200
PROJECT MEETINGS**

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to work of this section.

1.02 DESCRIPTION: This section includes administrative and procedural requirements for project meetings in the following categories:

- A. Pre-construction meetings
- B. Owner's Representative-General Contractor review meetings

1.03 RELATED WORK:

- A. Progress schedules: Section 01310

1.04 GENERAL REQUIREMENTS:

- A. Owner's Representative shall schedule and administer a pre-construction meeting, weekly progress meetings and coordination meetings, and specially called meetings throughout progress of the work including the following:
 - 1. Prepare agenda for meetings. Distribute written notice of each meeting four days in advance of meeting date, except for regularly scheduled weekly progress and weekly community briefing meetings. Make physical arrangements for meetings.
 - 2. Preside at meetings.
 - 3. Record the minutes; include significant proceedings and decisions.
 - 4. Include all issues of previous meetings until resolved.
 - 5. Reproduce and distribute copies of minutes within four (4) days after each meeting and send to:
Participants in the meeting , Parties affected by decisions made at the meeting ,
- B. Representatives of subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. Site observations required of the Owner's Representative shall be included in or coordinated with the regularly scheduled meetings whenever possible.

1.05 PRE-CONSTRUCTION MEETING:

- A. Owner's Representative shall schedule a pre-construction meeting to take place within ten (10) days of the date of Notice to Proceed and prior to the commencement of work. The meeting shall be held at a central site location and agreeable time as coordinated with the Owner's Representative. Attendance shall at a minimum include:

Owner's Representative
City of Steamboat Springs Project Engineer
Project Engineer
Testing Firm Representative

Contractor's Project Manager
Contractor's Superintendent
Contractor's On-site Supervisors
Surveyor
Traffic Control Supervisor
Subcontractor's key personnel
Other key project personnel

B. Suggested Agenda: Discuss items of significance that could affect progress including the topics as:

Tentative construction schedule
Critical Work sequencing
Designation of responsible personnel
Procedures for processing field decisions and Change Orders
Procedures for processing Applications for Payment
Distribution of Contract Documents
Submittal of Shop Drawings, Product Data and Samples
Testing and Engineering Inspection Requirements
Preparation of record documents
Construction Site Management
Community impact mitigation: maintaining access, loading deliveries, etc
Public Information Program
Safety procedures
Security
Housekeeping
Working days and hours
Temporary construction facilities and utilities

1.06 OWNER'S REPRESENTATIVE-GENERAL CONTRACTOR REVIEW MEETINGS:

A. Meetings shall be scheduled as necessary to review the general progress of the job and discuss all relevant open issues. The General Contractor's superintendent shall attend these meetings unless agreed to otherwise. Additionally, subcontractors shall be invited to attend as required and agreed to by the Owner's Representative. The Owner's Representative shall preside at meetings and take complete minutes. All items shall be tracked in minutes until resolved.

B. The Owner's Representative will schedule weekly job progress and coordination meetings at the site. Attendance shall include:

Contractor
Subcontractors, as appropriate to the agenda
Suppliers, as appropriate to the agenda
Owner's Representative
Others as appropriate for next week's work such as City Project Engineer, Project Engineer, Testing Firm

C. Suggested Agenda:

Review, approval of minutes of previous meeting.
Review of work progress since previous meeting.
Field observations, problems, conflicts.
Problems which impede Construction Schedule.
Review of off-site fabrication, delivery schedules.
Corrective measures and procedures to regain projected schedule.
Revisions to construction schedule.
Progress, schedule, during succeeding work period.
Coordination of schedules.
Review submittal schedules; expedite as required.
Review of testing requirements and observation needed
Pending changes and substitutions.

PART 2 PRODUCTS (Not applicable)

PART 3 EXECUTION (Not applicable)

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to work of this section.

1.02 DESCRIPTION: Section includes administrative and procedural requirements for submittal and review of product data, shop drawings, samples and similar items required by the specifications.

1.03 ADMINISTRATIVE SUBMITTALS:

- A. Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

1. Preconstruction Submittals
2. Schedules
3. Permits
4. Applications for payment
5. Schedule of Anticipated Payments
6. Schedule of Values
7. Closeout documents, Record Documents
8. Operations and Maintenance Information, Manuals, and Procedures
9. Warranties
10. Coordination drawings

- B. Such submittals are for information and record and do not require action on the part of the Owner's Representative except where not in conformity with the Contract documents. If such non-conformity is observed, the Owner's Representative will notify the Contractor. Failure to be observed or to be notified by the Owner's Representative does not relieve Contractor of compliance with Contract Documents.

1.04 SUBMITTAL PROCEDURES:

- A. General: Make submittals from Contractor to the Owner's Representative after Contractor has reviewed each submittal and indicated his action thereon except for samples and selection submittals.

B. Scheduling:

1. Within 10 days after Notice to Proceed, prepare a separate listing and schedule organized by related specification section number sequence, showing the principal work-related submittals and their initial submittal dates as required for coordination of the work.
2. Coordinate the submittal schedule with the construction schedule. Prepare the submittal schedule in chronological order.

C. Schedule Updating: Refer to Section 01310 Progress Schedules

D. Coordination:

1. Coordinate the preparation and processing of submittals with the performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
2. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
3. Coordinate transmittal of different types of submittals for related elements of Work so processing will not be delayed by the need to review submittals concurrently for coordination.
4. The Owner's Representative reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

E. Processing:

1. Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for re-submittals.
2. Allow seven (7) days for processing each submittal.
 - a) No extension of Contract Time will be authorized because of failure to transmit submittals to the Owner's Representative at least 7 days in advance of the Work to permit processing.

F. Submittal Transmittal:

1. Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to the Owner's Representative using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.
2. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

1.05 SHOP DRAWINGS:

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard

1. Dimensions
 2. Identification of products and materials included Compliance with specified standards
 3. Notation of coordination requirements
 4. Notation of dimensions established by field measurement
- B. Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- C. Shop Drawings, Product Data, and similar submittals are for the purpose to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Acceptance by Owner's Representative is for general conformity with the Contract Documents and not meant to be a review for completeness or accuracy of details, dimensions, quantities, installation or construction means, methods, techniques, processes, sequences, procedures, safety issues, nor performance, all of which remain the responsibility of the Contractor.
- D. The Contractor shall review all shop drawings, product data and similar submittals required for compliance with the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Owner's Representative without action. By approving and submitting Shop Drawings, Product Data, and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has and coordinated the information contained within such submittals with the requirements of Work and of the Contract Documents.
- E. The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, or similar submittals until the respective submittal has been approved by the Owner's Representative.
- F. The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Owner's Representative's approval of Shop Drawings, Product Data, or similar submittals unless the Contractor has specifically informed the Owner's Representative in writing of such deviation at the time of submittal and (1) the Owner's Representative has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, or similar submittals by the Owner's Representative approval thereof.

G. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, or similar submittals, to revisions other than those requested by the Owner's Representative on previous submittals. In the absence of such written notice the Owner's Representative approval of a resubmission shall not apply to such revisions.

H. Submit four (4) copies of each shop drawing.

1.06 PRODUCT DATA:

- A. Assemble Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, rough-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings". Where applicable include maintenance manual.
- B. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. A list of products is included in each appropriate specification division. Prepare a schedule in tabular form showing each product listed. Include the manufacturer's name and proprietary product names for each item listed.
1. Coordinate product list with the Contractor's Construction Schedule and the Schedule of Submittals.
 2. Form: Prepare product list with information on each item tabulated under the following column headings:
 - a) Related Specification Section number.
 - b) Generic name used in Contract Documents.
 - c) Proprietary name, model number, and similar designations.
 - d) Manufacturer's name and address.
 - e) Supplier's name and address.
 - f) Installer's name and address.
 - g) Projected delivery date or time span of delivery period.
 3. Initial Submittal: Within 10 days after date of Notice to Proceed, submit 3 copies of an initial product list. Provide a written explanation for omissions of data and for known variations from Contract requirements.
 4. Completed List: Within 20 days after date of Notice to Proceed, submit 3 copies of the completed product list. Provide a written explanation for omissions of data and for known variation from Contract requirements.
 5. Action: The Owner's Representative will respond in writing to Contractor within 1 week of receipt of the completed product list. No response within this period constitutes no objection to listed

- C. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
- D. Submit copies as above specified for final shop drawings. Submit a cover letter to show Contractor's review and action. Where applicable, include additional copies for maintenance manuals.
- E. Submit four (4) copies of product data.

1.07 SAMPLES:

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components. Include the following:
 - 1. Generic description of the Sample.
 - 2. Sample source.
 - 3. Product name or name of manufacturer or supplier.
 - 4. Compliance with recognized standards.
 - 5. Availability and delivery time.
- B. Submit Samples to the Owner's Representative who will review them for a final check of elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - 1. Where variation in characteristics are inherent in the material or product represented, submit multiple units (not less than 3), that show approximate limits of the variations.
 - 2. Refer to other Sections for Samples to be returned to the Contractor for incorporation in the Work. Such Samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of Sample submittals.
- C. Submittals:
 - 1. Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation and similar characteristics, submit 3 sets: one will be returned marked with the action taken.
 - 2. Maintain one (1) complete set of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.
- D. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

1.08 RECORD DOCUMENTS: Record Documents must be kept current throughout the Project. Requirements for Record Documents are found in Section 01770.

PART 2 PRODUCTS (Not applicable)

PART 3 EXECUTION (Not applicable)

END OF SECTION

SECTION 01310

PROGRESS SCHEDULES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to work of this section.

1.02 DESCRIPTION: Section includes administrative and procedural requirements for submittal and review of the construction schedule and progress schedules required by the specifications.

1.03 SCHEDULE SUBMITTALS:

- A. Contractor shall submit construction schedules and progress schedules in accordance with these specifications.
- B. Such submittals are for information and record and do not require action on the part of the Owner's Representative except where not in conformity with the Contract documents. If such non-conformity is observed, the Owner's Representative will notify the Contractor. Failure to be observed or to be notified by the Owner's Representative does not relieve Contractor of compliance with Contract Documents.
- C. All schedules submittals shall include 3 copies and one electronic copy.
- D. The Contractor shall provide:
 - 1. Overall Construction Schedule – Spanning the entire project
 - 2. Detailed Schedule – Detail on Work anticipated in project
 - 3. Weekly Schedule Update – A detailed one week past and two week look-ahead schedule
- E. Non compliance with the provisions of this section will be grounds for payment withholding by the Owner until the submittals are made in accordance with this section.

1.04 OVERALL CONSTRUCTION SCHEDULE

- A. The overall construction schedule shall identify all major activities on the project that meets the overall intent of the criteria described in section 01010 Summary of Work, no construction activity periods, and restricted activity periods, detours, traffic disruptions, punchlist corrections, and project closeout. The schedule shall cover the duration of the Work, beginning with the Notice to Proceed and concluding with Contract Completion Date. Each activity shall be two weeks or less in duration and identify the entity or trade performing the Work. The schedule shall be submitted to Owner's Representative at the Preconstruction Conference or sooner for approval. An approved schedule shall be required prior to payment.
- B. The critical path shall be clearly identified on the Overall Construction schedule.

1.05 DETAILED SCHEDULE:

- A. The Contractor shall provide a bar chart schedule covering the duration of the Work for project. The following guidelines shall be followed:
1. The bar chart shall contain a sufficient number of activities to allow effective monitoring of the progress of the work. The bar chart shall be cost loaded. The bar chart shall be resource loaded by including numbers for quantities of labor, equipment, and materials.
 2. Each activity shall contain only the work of a single trade or subcontractor.
 3. Each activity shall be less than 10 working days in duration. Procurement and material delivery activities may exceed the 10 working day duration. Longer duration activities shall be broken into two or more individual activities of less than 10 working days duration by area, type of work, etc. to allow for effective monitoring of the Work.
 4. The critical path of the Work shall be clearly indicated on the schedule.
- B. Schedule updating shall correspond with payment requests and be submitted with each payment request. The revision shall indicate actual progress to date, changes resulting from change orders, and planned changes necessary to complete the Work in accordance with the Contract Documents. The schedule shall be revised after each meeting or activity, where revisions have been recognized or made that affect the construction within a construction season.
- C. All costs associated with the development and maintenance of the schedule shall be borne by the Contractor.
- D. Methods Statement. A Methods Statement shall be prepared for the activities listed in Section 01010 1.02 Summary of Work, plus any activity not listed therein that the Contractor considers a controlling factor for timely completion. The Methods Statement shall be a detailed narrative describing each feature and all work necessary to complete the feature. The Methods Statement shall be submitted with the Contractor's schedule. The following format is required.
1. Feature: name of the feature;
 2. Responsibility: Contractor, subcontractor, supplier, utility, etc. responsible for the feature
 3. Procedures: procedures to be used to complete the work. The procedure to be used shall include general information regarding methods such as forming, excavation, pouring, heating and curing, backfill and embankment, trenching, protecting the work, etc. When separate or different procedures are to be employed by the Contractor due to seasonal or project phasing requirements, such differing procedures shall be described in the procedure statement;
 4. Production Rates: the planned quantity of work per day for each feature;
 5. Labor Force: the labor force planned to do the work;
 6. Equipment: the number, types, and capacities of equipment planned to do the work;
 7. Work Times: the planned time for the work to include:
 - a) number of work days per week
 - b) number of shifts per day

c) number of hours per shift.

8. Revised methods statements will be required if the Contractor intends to change the means and methods of construction and be submitted with the next monthly schedule update.

E. The schedule and method statements may be used as a tool in analyzing any requests for the changes to the contract due to changes in the Work.

1.06 WEEKLY SCHEDULE UPDATE:

A. Beginning with the Notice to Proceed and continuing throughout the Project, the Contractor shall develop and maintain a detailed work schedule which focuses on the activities planned for the following two weeks, and shows progress on the previous week's work.

B. The Weekly Schedule shall contain sufficient detail to show what specific work is scheduled, where the work is scheduled, the anticipated duration of the work, and the critical path activities.

C. This weekly schedule submittal is intended to:

1. Be the same schedule used by the Contractor for lining out his work with his foremen, workers, subcontractors, suppliers and all those associated with the project including the Owner, utility companies, local businesses, residents and others.

2. Provide a basis for discussion for the entire project team's activities during weekly meetings to identify critical work, issues, and other work which may affect the schedule.

3. The Weekly Schedule shall be updated weekly and submitted at the weekly project and community meeting.

D. The Weekly Schedule shall show the progress on the previous week's work and the scheduled work for the following two weeks.

PART 2 PRODUCTS (Not applicable)

PART 3 EXECUTION

3.01 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner's Representative.

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to work of this section.

1.02 DESCRIPTION: This Section includes administrative and procedural requirements for quality control services

- A. Field samples and field testing
- B. Mock-ups Inspection
- C. Testing laboratory services
- D. Manufacturer's field services and reports

1.03 RELATED WORKS:

- A. General Conditions - Inspections, testing and approvals required by public authorities
- B. Section 01300 – Submittals
- C. Inspections and tests required and standards for testing: Individual Specification sections

1.04 REFERENCES:

- A. ASTM D3740, "Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction".
- B. ASTM E329, "Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction".
- C. Should specified reference standards conflict with the Contract Documents, request clarification from the Owner's Representative before proceeding.

1.05 DEFINITIONS:

- A. Quality control services include inspections and tests, and related actions, including reports, performed by independent agencies, governing authorities, and the Contractor. Contract enforcement activities performed by the Owner's Representative are not included.
- B. Inspection and testing services required to verify compliance with requirements specified do not relieve the Contractor of responsibility to comply with requirements of the Contract Documents.
- C. The following requirements apply to customized fabrication and installation procedures and not production of standard products.

Specific quality control requirements, inspections and tests, covering production, customized fabrication and installation procedures of standard products are specified in the individual sections.

Inspections, tests and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Documents.

Requirements for the Contractor to provide quality control services requested by the Owner's Representative or authorities having jurisdiction are not limited by provisions of this Section.

1.06 RESPONSIBILITIES:

- A. Contractor Responsibilities: The Contractor shall provide inspections, tests and similar quality control services, specified in individual specification sections and required by governing authorities, except where they are indicated to be the responsibility of City of Steamboat Springs, or are provided by another entity. Costs for City services shall not be included in the Contract Sum or bid item unless indicated in special provisions.
 - 1. The Contractor is responsible for coordinating all testing with the testing agencies, Owner's Representative, Project Engineer, Testing Engineer, and utility companies.

The Contractor shall give notice to the Owner's Representative, Project Engineer, and Testing Engineer at least 2 working days prior to all required testing, whether testing is provided by the Contractor or Owner.

Limitations: Where manufactured products or equipment are required to have representative samples tested, do not use such materials or equipment until tests have been made and the materials or equipment are found to be acceptable. Do not incorporate in the work any product that becomes unfit for use after acceptance.

Associated Services: The Contractor shall cooperate with Owner's Representative, Project Engineer, Testing Engineer, or other agencies performing required inspections, tests and similar services and provide reasonable associated services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Associated services required include:

- a) Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
- b) Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
- c) Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
- d) Providing adequate facilities for safe storage and proper curing of concrete test cylinders on the project site for the first 24 hours after casting as required by ASTM C31.
- e) Providing the agency with a preliminary design mix proposed for use for material mixes that require control by the testing agency.
- f) Security and protection of samples and test equipment at the project site.
- g) The Owner shall have the responsibility to specify the frequency of testing for testing provided by the Owner. If the Contractor feels additional testing is required, the contractor may request the Owner to perform additional testing. Additional testing requested by the contractor shall be at the sole cost to the Contractor.

Utilities Tests and Inspections.

- h) Contractor shall give Owner's Representative, Project Engineer, and Testing Engineer timely Notice of Readiness of the Work for all required inspections, tests or approvals.
- i) If any law, ordinance, rule, regulation, code, or order of any public body having jurisdiction requires any Work (or part thereof) specifically to be inspected, tested or approved, Contractor shall assume full responsibility therefore, pay all costs in connection therewith and furnish Owner's Representative the required certificates of inspection, testing or approval. Contractor shall also be responsible for and shall pay all costs in connection with Owner's or Owner's Representative acceptance of a manufacturer, fabricator, supplier or distributor of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. The cost of all other inspections, tests and approvals required by the Contract Documents shall be paid by Owner (unless otherwise specified), except that the cost of re-testing of materials and equipment as a direct result of a failure to pass a specified test shall be paid by Contractor.
- j) All inspections, tests or approvals other than those required by law, ordinance, rule, regulation, code or order of any public body having jurisdiction shall be performed by organizations acceptable to Owner and Contractor (or by Owner's Representative, if so specified).
- k) If any Work that is to be inspected, tested or approved is covered without written concurrence of Owner's Representative or Project Engineer, it must, if requested by Owner's Representative or Project Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely Notice of Contractor's intention to cover such Work and Owner's Representative or Project Engineer has not acted with reasonable promptness in response to such notice.
- l) Neither observations by Owner's Representative or Project Engineer or inspections, tests or approvals by others shall relieve Contractor from his obligations to perform the Work in accordance with the Contract Documents.

B. Owner's Responsibilities:

- 1. The Owner's Representative will provide inspections, tests and similar quality control services specified to be performed by independent agencies and not by the Contractor, except where they are specifically indicated as the Contractor's responsibility or are provided by authorities having jurisdiction or another identified entity. Costs for these services are not included in the Contract Amount.

The Owner's Representative will employ and pay for the services of an independent agency, testing laboratory or other qualified firm to perform services which are Owner's responsibility.

Duties of Testing Agency:

- a) The independent testing agency engaged to perform inspections, sampling and testing of materials shall cooperate with Owner and Contractor in performance of its duties, and shall provide qualified personnel to perform required inspections and tests.
- b) The agency shall notify the Owner and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
- c) The agency is not authorized to release, revoke, alter or enlarge any requirement of the Contract documents, or approve or accept any portion of the Work.

d) The agency shall not perform any duties of the Contractor.

Coordination:

e) The Contractor and each agency engaged to perform inspections, tests and similar services shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

f) The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

1.07 SUBMITTALS:

A. A certified written report of each inspection, test or similar service, will be submitted directly to the Owner's Representative; except to the Contractor with copy to the Owner's Representative when service is the Contractor's responsibility. Submit additional copies directly to governing authorities or utilities when requested by that authority.

B. Report Data: Written reports of each inspection, test, or similar service shall include, but not be limited to:

1. Date of issue.
2. Project title and number.
3. Dates and locations of samples and tests or inspections.
4. Names of individuals making the inspection or test.
5. Designation of the work and test method.
6. Identification of product and specification section.
7. Complete inspection or test data.

Test results and interpretation of test results

8. Ambient conditions at the time of sample taking and testing.

Comments or professional opinion as to whether inspected or tested work complies with Contract Document requirements.

Name and signature of laboratory inspector.

Recommendations on retesting.

1.08 QUALITY ASSURANCE:

A. Qualification of Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by American Council of Independent Laboratories, which are recognized in the industry as specialized in the types of inspections and tests to be performed and which have not less than five (5) years experience in such testing.

- B. Comply with requirements of ASTM E329 and ASTM D3740.
 - 1. Each inspection and testing agency shall be authorized to operate in the State of Colorado.
 - 2. Maintain a full time registered engineer on staff to review services.
 - 3. Calibrate testing equipment at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or of accepted values of natural physical constants.
- C. Control of Installation:
 - 1. Monitor quality control over products, services, site conditions, and workmanship to produce work of specified quality.
 - 2. Comply fully with manufacturers' instructions, including each step in sequence.
 - 3. Should manufacturers' instructions conflict with Contract Documents, request clarification from Owner's Representative before proceeding.
 - 4. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
 - 5. Perform work by persons qualified to produce workmanship of specified quality.

1.09 FIELD SAMPLES:

- A. Install field samples for review at the site as required by individual specification sections.
- B. Assemble and erect specified items with specified or required attachment and anchorage devices, flashings, seals, and finishes.

1.10 INSPECTION AND TESTING LABORATORY SERVICES:

- A. Perform inspections, tests and other services specified in individual specification sections.
- B. Submit reports indicating observations and results of tests indicating compliance or noncompliance with Contract Documents.

1.11 MANUFACTURER'S FIELD SERVICES:

- A. When specified in respective Specification sections, Contractor shall require supplier or manufacturer to provide qualified personnel to observe field conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, testing, adjusting and balancing of equipment as applicable, and to make appropriate recommendations.
- B. Manufacturer's representative shall submit written report to the Owner's Representative listing observations and recommendations.

PART 2 PRODUCTS (Not applicable)

PART 3 PART 3 - EXECUTION

3.01 REPAIR AND PROTECTION:

- A. Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes.
- B. Protect construction exposed by or for quality control service activities, and protect repaired construction.
- C. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

3.02 SCHEDULE OF INSPECTIONS AND TESTS: The following is a summary of tests and inspections. Additional testing as referenced in individual sections will also be required.

A. Testing Responsibility

1. The Contractor shall be responsible for testing and the cost thereof of the following:

- a) Utility testing – in conformance with utility company standards
- b) Mechanical features
- c) Electrical elements
- d) Manufactured items

The Owner will be responsible for testing and the cost thereof of the following:

- e) Earthwork, fills and backfills
- f) Asphalt Concrete

B. Limited Schedule of quality control tests and inspections – adjusted as necessary by the Owner’s Representative.

Test/Inspection Description

ASTM Test Frequency

Section 02200/02221/02232 /2236

General Material Testing

	1 per each soil type
Proctor	D698
Plasticity index	D4318
Particle size analysis	D422
Field density tests	D2922
Field moisture tests	D3017

Moistur/ Density Testing:

General fills for buildings	1 per 2000 SF
Backfill	1 per 250 SF
Site work	1 per 400 CY
Storm Sewer lines	1 per 100 LF
Sidewalk	1 per 100 LF
Roadways (subgrade and base course)	1 per 100 LF alternating right, center, and left lanes; each lift

Proof Roll

Public Roads

all road base prior to paving

Section 02513:

Asphaltic Concrete Testing

Marshall	D1559
Specific Gravity	CP - 51
Extraction/gradation	D2172, C136
Field density-nuclear cores	D2950 CDOT CP-44

1/day or each 500 tons

Density

1 per 500 LF each lift, each lane

Core Thickness Verification

1 per 500 lf each lift, at center of road, left edge, right edge

Section 2515

Concrete Testing

Slump
Air
Cylinders

1/day or each 500 tons

END OF SECTION

SECTION 01420

REFERENCE STANDARDS

PART 1 - GENERAL

The following abbreviations, which may be used in the construction specifications, refer to the organizations and specifications of the organizations listed below:

- AA Aluminum Association 900 19th Street, NW, Suite 300 Washington, D.C. 20006-2168
- AABC Associated Air Balance Council 1518 K Street, NW, Suite 503 Washington, D.C. 20005
- AAMA American Architectural Manufacturers Association 1827 Walden Office Square, Suite 104 Schaumburg, Illinois 60173-4268
- AAN see ANLA
- AASHTO American Association of State Highway and Transportation Officials 444 North Capitol Street, NW, Suite 249 Washington, D.C. 20001
- AATSA American Traffic Safety Services Association 15 Riverside Parkway Suite 100 Fredericksburg, VA 22406-1717
- ABMA American Boiler Manufacturers Association 950 N. Glebe Road, Suite 160 Arlington, Virginia 22203-1824
- ACI American Concrete Institute P.O. Box 9094 Farmington Hills, Michigan 48333-9094
- ACPA American Concrete Pipe Association 222 West Las Colinas Boulevard, Suite 641 Irving, Texas 75039-5423
- ADC Air Diffusion Council 11 South LaSalle Street, Suite 1400 Chicago, Illinois 60603
- AFPA American Forest and Paper Association 1111 19th Street, NW, Suite 800 Washington, D.C. 20036
- AGA American Gas Association 1515 Wilson Boulevard Arlington, Virginia 22209
- AHA American Hardboard Association 1210 W. Northwest Highway Palatine, Illinois 60067-1897
- AHAM Association of Home Appliance Manufacturers 20 N. Wacker Drive, Suite 1500 Chicago, Illinois 60606
- AI Asphalt Institute Research Park Drive P.O. Box 14052 Lexington, Kentucky 40512-4052
- AIA American Institute of Architects 1735 New York Avenue, N.W. Washington, DC 20006-5292
- AISC American Institute of Steel Construction 1 East Wacker Drive, Suite 3100 Chicago, Illinois 60601-2001
- AISI American Iron and Steel Institute 1101 17th Street, NW Washington, D.C. 20036-4700
- AITC American Institute of Timber Construction 7012 S. Revere Parkway, Suite 140 Englewood, Colorado 80112
- ALSC American Lumber Standards Committee P.O. Box 210 Germantown, Maryland 20875

- AMCA Air Movement and Control Association International, Inc. 30 W. University Drive Arlington Heights, Illinois 60004-1893
- ANLA American Nursery and Landscape Association 1250 I Street, NW, Suite 500 Washington, D.C. 20005
- ANSI American National Standards Institute 11 West 42nd Street, 13th Floor New York, New York 10036
- APA American Plywood Association (See EWA)
- APWA American Public Works Association 106 West 11th Street, Suite 1800 Kansas City, Missouri 64105-1806
- ARI Air-Conditioning and Refrigeration Institute 4301 Fairfax Drive, Suite 425 Arlington, Virginia 22203
- ARMA Asphalt Roofing Manufacturers Association Center Park, 4041 Powder Mill Road, Suite 404 Calverton, Maryland 20705
- ASC Adhesive and Sealant Council 1627 K Street, NW, Suite 1000 Washington, D.C. 20006-1707
- ASCE American Society of Civil Engineers 1801 Alexander Bell Drive Reston, Virginia 20191-4400
- ASHRAE American Society of Heating, Refrigerating, and Air-Conditioning Engineers 1791 Tullie Circle, NE Atlanta, Georgia 30329-2305
- ASLA American Society of Landscape Architects 4401 Connecticut Avenue, NW Fifth Floor Washington, D.C. 20008-2369
- ASME American Society of Mechanical Engineers 345 East 47th Street New York, New York 10017
- ASPE American Society of Plumbing Engineers 3617 Thousand Oaks Boulevard, Suite 210 Westlake, California 91362-3649
- ASSE American Society of Sanitary Engineering 28901 Clemens Road, Suite 100 Westlake, Ohio 44145
- ASTM American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, Pennsylvania 19428-2959
- AWI Architectural Woodwork Institute 1952 Isaac Newton Square Reston, Virginia 20190
- AWPA American Wood-Preservers' Association 3246 Fall Creek Highway, Suite 1900 Granbury, Texas 76049-7979
- AWPI American Wood Preservers Institute 1945 Old Gallows Road, Suite 550 Vienna, Virginia 22182
- AWS American Welding Society, Inc. 550 NW LeJeune Road Miami, Florida 33126
- AWWA American Water Works Association 6666 W. Quincy Avenue Denver, Colorado 80235
- BHMA Builders Hardware Manufacturers Association, Inc. 355 Lexington Avenue, 17th Floor New York, New York 10017-6603
- BIA Brick Institute of America 11490 Commerce Park Drive Reston, Virginia 22091-1525
- BOCA Building Officials Code Administrators 4051 W. Flossmoor Road Country Club Hills, Illinois 60478-5795

CBM Certified Ballast Manufacturers 1422 Euclid Avenue, Suite 402 Cleveland, Ohio 44115-2851

CDA Copper Development Association, Inc. 260 Madison Avenue, 16th Floor New York, New York 10016-2401

CDOT Colorado Department of Transportation 4201 Arkansas Avenue Denver, CO 80222

CE Corps of Engineers 20 Massachusetts Avenue, NW Washington, D.C. 20314

CID Commercial Item Description See contract clauses

CISPI Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, Tennessee 37421

CLFMI Chain Link Fence Manufacturers Institute 9891 Broken Land Parkway, Suite 300 Columbia, Maryland 21046

CRA California Redwood Association 405 Enfrente Drive, Suite 200 Novato, California 94949

CRI Carpet and Rug Institute 310 S. Holiday Avenue Dalton, Georgia 30722-2048

CRSI Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, Illinois 60173-4758

CS Commercial Standard of NBS (U.S. Department of Commerce) Government Printing Office Washington, D.C. 20402

CSSB Cedar Shingle and Shake Bureau 515 116th Avenue, NE, Suite 275 Bellevue, Washington 98004-5294

DHI Door and Hardware Institute 14170 Newbrook Drive Chantilly, Virginia 22021-2223

EPA Environmental Protection Agency 401 M Street, SW Washington, D.C. 20460

EWA APA- The Engineered Wood Association P.O. Box 11700 Tacoma, Washington 98411-0700

FHA Federal Housing Administration (U.S. Department of Housing and Urban Development) 451 7th Street, SW Washington, D.C. 20410

FHVA Fine Hardwood Veneer Association 260 S. First Street, Suite 2 Zionsville, Indiana 46077

FHWA Federal Highway Administration 555 Zang Street Lakewood, CO 80228

FM Factory Mutual System 1151 Boston-Providence Turnpike
P.O. Box 9102 Norwood, Massachusetts 02062-9102

FS Federal Specifications See contract clauses

GA Gypsum Association 810 First Street, NE, Suite 510 Washington, D.C. 20002

GANA Glass Association of North America 3310 SW Harrison Street Topeka, Kansas 66611-2279

HI Hydronics Institute 35 Russo Place P.O. Box 218 Berkeley Heights, New Jersey 07922

HMA Hardwood Manufacturers Association 400 Penn Center Boulevard, Suite 530 Pittsburgh, Pennsylvania 15235-5605

HPMA Hardwood Plywood Manufacturers Association P.O. Box 2789 Reston, Virginia 22090-2789

IA Irrigation Association 1911 N. Fort Myer Drive, Suite 1009 Arlington, Virginia 22209-1630

ICBO International Conference of Building Officials 5360 S. Workman Mill Road Whittier, California 90601

ICEA Insulated Cable Engineers Association, Inc. P.O. Box 440 South Yarmouth, Massachusetts 02664

IEEE The Institute of Electrical and Electronics Engineers 345 E. 47th Street New York, New York 10017-2394

IES Illuminating Engineering Society of North America 120 Wall Street, 17th Floor New York, New York 10005-4001

IGCC See ITS

ILIA Indiana Limestone Institute of America, Inc. Stone City Bank Building, Suite 400 Bedford, Indiana 47421

ITS Internek Testing Services 3393 Route 11 P.O. Box 2040 Cortland, New York 13045-7902

KCMA Kitchen Cabinet Manufacturers Association 1899 Preston White Drive Reston, Virginia 22091-4326

LIA Lead Industries Association, Inc. 295 Madison Avenue New York, New York 10017

MBMA Metal Building Manufacturer's Association c/o Thomas Associates, Inc. 1300 Sumner Avenue Cleveland, Ohio 44115-2851

MFMA Maple Flooring Manufacturers Association 60 Revere Drive, Suite 500 Northbrook, Illinois 60062

MIA Marble Institute of America 30 Eden Alley, Suite 201 Columbus, Ohio 43215

MIMA Mineral Insulation Manufacturers Association 1420 King Street Alexandria, Virginia 22314

MLSFA Metal Lath/Steel Framing Association - A Division of NAAMM 8 South Michigan Avenue, Suite 1000 Chicago, Illinois 60603

MS Military Standardization Documents See contract clauses

MSHA Mine Safety and Health Administration 4015 Wilson Boulevard, Room 601 Arlington, Virginia 22203

MSS Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park Street, NE Vienna, Virginia 22180-4602

MUTCD Manual of Uniform Traffic Control

NAAMM The National Association of Architectural Metal Manufacturers 8 South Michigan Avenue, Suite 1000 Chicago, Illinois 60603

NACE National Association of Corrosion Engineers 1440 South Creek Drive P.O. Box 218340 Houston, Texas 77218-8340

NAIMA North American Insulation Manufacturers Association 44 Canal Center Plaza, Suite 310 Alexandria, Virginia 22314

NAPA National Asphalt Pavement Association NAPA Building 5100 Forbes Boulevard Lanham, Maryland 20706-4413

NAPCA National Association of Pipe Coating Applicators 8th Floor, Commercial National Bank Building 333 Texas Street, Suite 800 Shreveport, Louisiana 71101-3673

NBS National Bureau of Standards (U.S. Department of Commerce)(See NIST)

NCMA National Concrete Masonry Association 2302 Horse Pen Road Herndon, Virginia 20171-3499

NEC National Electrical Code (by NFPA)

NECA National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100 Bethesda, Maryland 20814

NELM Northeastern Lumber Manufacturers' Association 272 Tuttle Road P.O. Box 87A Cumberland Center, Maine 04021-0687

NEII National Elevator Industry, Inc. 185 Bridge Plaza North, Suite 310 Fort Lee, New Jersey 07024

NEMA National Electrical Manufacturers Association 1300 N. 17th Street, Suite 1847
Rosslyn, Virginia 22209

NFPA National Fire Protection Association 1 Batterymarch Park P.O. Box 9101 Quincy, Massachusetts 02269-9101

NHLA National Hardwood Lumber Association P.O. Box 34518 Memphis, Tennessee 38184-0518

NHPMA Northern Hardwood and Pine Manufacturers Association, Inc., c/o Northern Softwood Lumber Bureau Box 217 Dear River, Minnesota 56636

NIOSH National Institute for Occupational Safety and Health NIOSH Building 1, Room 3007 1600 Clifton Road, NE Atlanta, Georgia 30333

NIST National Institute of Standards and Technology (US Department of Commerce) Building 101, #A1134 Route I-270 and Quince Orchard Road Gaithersburg, Maryland 20899 Send requests for publications to: Superintendent of Documents Government Printing Office Washington, D.C. 20402

NOFMA National Oak Flooring Manufacturers Association P.O. Box 3009 Memphis, Tennessee 38173-0009

NPA National Particleboard Association 18928 Premiere Court Gaithersburg, Maryland 20879-1569

NRCA National Roofing Contractors Association O'Hare International Center 10255 W. Higgins Road, Suite 600 Rosemont, Illinois 60018-5607

NSF NSF International (Formerly National Sanitation Foundation) 3475 Plymouth Road
P.O. Box 130140 Ann Arbor, Michigan 48113-0140

NTMA The National Terrazzo and Mosaic Association 3166 Des Plaines Avenue, Suite 121 Des Plaines, Illinois 60018

NWWDA National Wood Window and Door Association 1400 East Touhy Avenue, Suite G-54 Des Plaines, Illinois 60018

OSHA Occupational Safety and Health Administration U.S. Department of Labor 200 Constitution Avenue, NW Washington, D.C. 20210

PCA Portland Cement Association 5420 Old Orchard Road Skokie, Illinois 60077-1083

PCI Precast/Prestressed Concrete Institute 175 W. Jackson Boulevard Chicago, Illinois 60604

PDI Plumbing and Drainage Institute 45 Briston Drive, Suite 101 South Euston, Massachusetts 02375

PEI Porcelain Enamel Institute, Inc. 4004 Hillsboro Pike, Suite 224-B Nashville, Tennessee 37215

PI Perlite Institute, Inc. 88 New Dorp Plaza Staten Island, New York 10306

PS Product Standard of NBS (U.S. Department of Commerce) Government Printing Office Washington, D.C. 20402

RFCI Resilient Floor Covering Institute 966 Hungerford Drive, Suite 12-B Rockville, Maryland 20850-1714

RIS Redwood Inspection Service (Grading Rules) 405 Enfrente Drive, Suite 200 Novato, California 94949

RMMI Rocky Mountain Masonry Institute 1780 South Bellaire Street, No. 602 Denver, Colorado 80222

SCMA Southern Cypress Manufacturers Association 400 Penn Center Blvd., Suite 530 Pittsburgh, Pennsylvania 15235

SDI Steel Deck Institute P.O. Box 25 Fox River Grove, Illinois 60021

SDI Steel Door Institute 30200 Detroit Road Cleveland, Ohio 44145-1967

SFPA Southern Forest Products Association P.O. Box 52468 New Orleans, Louisiana 70152

SGCC See ITS

SIGMA Sealed Insulating Glass Manufacturers Association 401 N. Michigan Avenue Chicago, Illinois 60611-4267

SJI Steel Joist Institute 3127 10th Avenue, North Ext. Myrtle Beach, South Carolina 29577-6760

SMACNA Sheet Metal and Air-Conditioning Contractors' National Association, Inc. 4201 Lafayette Center Drive P.O. Box 221230 Chantilly, Virginia 20151-1209

SPIB Southern Pine Inspection Bureau (Grading Rules) 4709 Scenic Highway Pensacola, Florida 32504-9094

SSPC Steel Structures Painting Council 40 24th Street, 6th Floor Pittsburgh, Pennsylvania 15222-4643

SWI Steel Window Institute c/o Thomas Associates, Inc. 1300 Sumner Avenue Cleveland, Ohio 44115-2851

TCA Tile Council of America 100 Clemson Research Boulevard Anderson, South Carolina 29625

TIMA Thermal Insulation Manufacturers Association (See NAIMA)

TPI Truss Plate Institute 583 D'Onofrio Drive, Suite 200 Madison, Wisconsin 53719

UBC Uniform Building Code (by ICBO)

UDFCD Urban Drainage and Flood Control District 2480 West 26th Avenue, Suite 156-B Denver, CO 80211

UL Underwriters Laboratories, Inc. 333 Pfingsten Road Northbrook, Illinois 60062

USDA U.S. Department of Agriculture 14th Street and Independence Avenue, SW Washington, D.C. 20250

WCLB West Coast Lumber Inspection Bureau (Grading Rules) P.O. Box 23145 Portland, Oregon 97281-3145

WIC Woodwork Institute of California P.O. Box 980247 West Sacramento, California 95798-0247

WMMPA Wood Moulding and Millwork Producers Association 507 First Street Woodland, California 95695

WRI Wire Reinforcement Institute, Inc. 203 Loudoun Street, SW Leesburg, Virginia 20175-2718

WSFI Wood and Synthetic Flooring Institute (See MFMA)

WWPA Western Wood Products Association (Grading Rules) Yeon Building 522 SW 5th Avenue Portland, Oregon 97204-2122

WWPA Woven Wire Products Association 2515 Nordica Avenue Chicago, Illinois 60635

WWPI Western Wood Preservers Institute 7017 NE Highway 99 #108 Vancouver, Washington 98665

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION (Not applicable)

END OF SECTION

SECTION 1505

MOBILIZATION

PART I GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.
- B. Construction Site Management Plan General Notes – Attachment A to this Section

1.02 DESCRIPTION: The construction site management including such items as mobilization, maintenance, and demobilization of personnel, equipment, facilities, and supplies as needed to support the project and complete the work.

1.03 RELATED WORK:

- A. Section 1560: Dust Control
- B. Section 1565: Erosion Control
- C. Section 1570: Traffic and Pedestrian Control
- D. Section 02125: Tree Protection

1.04 GENERAL:

- A. The mobilization of personnel, equipment and supplies at the project site in preparation for work on the project shall be completed by the Contractor. Separate mobilization by Phases where applicable and approved by Owner's Representative. Mobilization item shall also include required bonds, insurance and preparation of the Project Schedule. Mobilization shall include project staging.
- B. Mobilization shall also include the demobilization of contractor's personnel, equipment and supplies offsite and the cleanup of the project site. Cleanup of the site shall restore the project site to preconstruction conditions or better.
- C. Nothing in this section is intended to limit types and amounts of temporary work required, and no omission from this section will be recognized as an indication that such temporary activity is not required for successful completion of the work. The use of alternative facilities equivalent to those specified is the Contractor's option subject to the Owner's Representative's acceptance. Reference is made to other sections for more detailed requirements for temporary facilities.
- D. Any facilities, materials storage, or other use of the right-of-way or City easements must be approved by the City prior to use.
- E. Any use of offsite facilities not in control of the Contractor for construction site management related to this project must be approved in writing by the offsite owner and the written documentation submitted to Owner's Representative prior to use.
- F. Scheduled Uses: Provide temporary facilities and services at the time first needed at the site; and maintain, expand and modify the facilities as needed throughout the construction period. Do not remove service until it is no longer needed. At the earliest feasible time, and when acceptable to the Owner's Representative, change over from the use of temporary utility service to permanent service as applicable.

- G. Conditions of Use: Keep temporary services and facilities clean and neat in appearance and in working order until removed. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous, dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

1.05 QUALITY ASSURANCE:

- A. Comply with governing regulations, industry standards, and utility company regulations, including , but not limited to codes, permits, inspections, testing, and health and safety, fire, pollution, and environmental regulations.
- B. Signage and Barricades: All signs, barricades, or other site control measures regulated by the “Manual of Uniform Traffic Control Devices for Streets and Highways”, US Department of Transportation, Federal Highway Administration, including State of Colorado supplements or as detailed in the Contract Documents shall be in conformance with those documents.
- C. Temporary Utilities: Engage the appropriate local utility company to install temporary service or connect to existing services as needed. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment; comply with the utility company’s regulations.
- D. Arrange with the utility company for a time when service can be interrupted, if necessary, to make connections for temporary service.

1.06 SUBMITTALS:

- A. Construction Site Management Plan: Prior to the issuance of a building permit or any construction including mobilization, the Contractor must submit a Construction Site Management Plan to the City of Steamboat Springs for review and approval.

PART 2 PRODUCTS

1.07 MATERIALS AND EQUIPMENT:

- A. Provide either new or used materials and equipment for temporary facilities and as approved by the Owner’s Representative. Such materials shall be in substantially undamaged and serviceable condition. Provide types and qualities that are recognized in the construction industry as suitable for the intended use in each application.
- B. Barricades and Signs shall meet the requirements of ANSI D6.1-78, "Manual on Uniform Traffic Control Devices”

1.08 CONSTRUCTION SITE MANAGEMENT PLAN: The Construction Site Management Plan, at a minimum, must include the following:

- A. Erosion and Sedimentation Control Plan – See Section 01565.
- B. Site Construction Facilities (Identify the following):
 - 1. Staging areas
 - 2. Storage areas
 - 3. Stockpile areas
 - 4. Dumpsters and trash receptacles

5. Sanitary facilities
 6. Loading areas
 7. Trailers and field offices (show access)
 8. LPG Tank- Liquid Propane Gas tank (for winter heating of structures prior to full power)
 9. Parking: Location and number of onsite and any offsite parking spaces
- C. External Traffic Control Plan showing:
10. Truck schedule (# movements per day, and time of day)
 11. Site access points: show existing adjacent streets and driveways; identify any changes and associated signage
 12. Sidewalk and trails; identify any changes and associated signage
 13. Use of the public right-of-way (ROW) – generally not permitted; for constrained sites show any proposed use of ROW
 14. Crane use details, including but not limited to: ROW encroachment, swing radius, loading locations. (Crane will require revocable permit from the City of Steamboat Springs)
- D. Internal Access Control showing:
1. Internal routes
 2. Emergency access- 24' all weather surface for emergency access thru site (to be maintained at all times)

1.09 TEMPORARY FENCES AND BARRICADES:

- A. General: Material may be new or used, but shall be suitable for intended purpose. Fences and barriers shall be structurally adequate and neat in appearance. Fences and barriers shall be in accordance with the standards of the City of Steamboat Springs.
- B. Construction Barrier Fencing: Of adequate plywood construction with a minimum height of 4' height, painted dark green or other as required by City planning code, and be able to withstand 80mph windload.
 1. Where required or as directed by the Owner's Representative, provide adequate plywood construction barrier fencing to enclose partially completed areas of construction that pose a severe safety hazard to the public (e.g., playground equipment). Provide locking entrance to prevent unauthorized entrance, vandalism, theft and similar violations of security. Maintain the fence throughout the course of construction and remove only upon approval of the Owner's Representative.
 2. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup.
- C. Portable Chain Link Fencing: Shall be open mesh fencing, 6-ft. height, with top and bottom rails. Posts shall be spaced at max. 8-feet on center, and be equipped with cross bar bases for stability. Weigh bases down with sandbags as needed to stabilize the fence. Provide with lockable gates.

- D. Barrier Tape: Banner Guard, imprinted with "CAUTION: CONSTRUCTION AREA", manufactured by Reef Industries, Inc., Houston, Texas, or approved equal.
- E. Barricades, Warning Signs and Lights: Erect and maintain barricades, lights, danger signals, and warning signs in accordance with ANSI D6.1 and the approved Traffic Control Plan.
 - 1. The Contractor shall take all measures necessary to provide safety for the public as part of his construction practices.
 - 2. Fence, barricade, or otherwise block off the immediate work area to prevent unauthorized entry into the work area. Fence the extents of the Limits of Work as shown in the plans.
 - 3. Adequately barricade and post all open cuts in the project area. Illuminate barricades and obstructions at night; keep safety lights burning from sunset to sunrise.
 - 4. Use street plates over open cuts and position excavation equipment to minimize any open trenches.
 - 5. Barrier Tape: Install where needed. Keep a minimum of two rolls on site at all times.
 - 6. Cover pipes, hoses, and power lines crossing sidewalks and walkways with troughs using beveled edge boards.
 - 7. Provide adequate signage to direct both vehicular and pedestrian traffic. Additional information is provided in Section 1570 Pedestrian and Traffic Control.
 - 8. Removal: Completely remove barriers no longer needed and when approved by the Owner's Representative.
- 1.10 CLEANING MATERIALS: Use only cleaning materials recommended by manufacturer of surface to be cleaned. All precautions shall be taken to prevent damage to the environment.
- 1.11 SANITARY FACILITIES: Install temporary toilets in available locations which will best serve the needs of personnel at the project site. Contractor shall verify locations with the Owner's Representative prior to construction.
- 1.12 PARKING: Contractor shall direct staff, suppliers, and site related persons to park in areas designated on the Construction Site Management Plan. Contractor shall be responsible for maintaining any fire lanes or public parking areas free from Contractor related vehicles unless otherwise authorized by the Owner's Representative.

PART 3 EXECUTION

1.13 PROTECTIVE MEASURES:

A. Protection of the Work:

1. The Contractor shall obtain the advice and recommendations of his installers for procedures to protect their work. Installers are responsible for protecting their work and that of other trades in overlapping and adjacent areas. When the Installer is no longer working in the area or at the job, the Contractor shall provide protective measures and materials to assure that each element will be protected from damage or deterioration (other than normal weathering for exterior exposed materials) until Final Acceptance. Remove protective coverings and materials at the appropriate time but no later than final cleaning operations.
2. Always protect excavations, trenches, and subgrades from damage by snow, snowmelt, rain water, spring water, ground water, or backed up drains or sewers. Provide pumps or other equipment as required.
3. Cold Weather Protection: Provide temporary heat or blanket heating required by construction activities, for curing or drying of completed installations or protection of installed construction from adverse effects of low temperatures or high humidity. Provide freeze protection for all temporary water service piping. Select safe equipment that will not have a harmful effect on completed installations or elements being installed.
4. Protection of Existing Trees and Vegetation: Protect existing trees and other vegetation to remain in place, against damage to roots, trunks or branches. Do not stockpile construction materials or excavated materials within drip line. Provide fencing around vegetated areas not to be disturbed. Provide temporary guards to protect trees and vegetation to be left standing. Refer to Section 02125.
5. Environmental Protection: Conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result.
 - a) Take all necessary reasonable measures to reduce air and water pollution by any material or equipment used during construction.
 - b) The Contractor shall take all reasonable measures to reduce noise pollution from construction operations and to be in compliance with the City of Steamboat Springs noise ordinance.
 - c) The Contractor shall acquire all necessary dewatering permits and adhere to its conditions.

1.14 CLEANING UP:

A. Clean-Up During Construction:

1. Oversee cleaning and ensure that grounds and public properties are maintained free from accumulation of waste materials and rubbish.
2. Take measures to prevent spread of trash, debris, cartons, packaging or other waste materials on or off the Project Site by wind.
3. On every day during progress of work, clean up site and access and dispose of waste materials, rubbish and debris.
4. Clean adjacent and nearby streets of dirt occasioned by construction operations; frequency and methods as required by governing authority.

5. Keep volatile wastes in covered containers.
6. Utilize excavated material as soon as possible.
7. Pedestrian walkways and detours at the Project Site shall be kept free from debris, rubbish, mud, and dust.

1.15 WASTE DISPOSAL:

- A. Collection and Disposal of Wastes: Establish and enforce a daily system for collecting and disposing of waste materials from construction areas and elsewhere at the project site. Provide suitable trash containers at a central collection point on the site.
 1. Burning or burying of waste materials on the project site is not permitted.
 2. Disposal of volatile fluids and wastes in storm sewers, sanitary sewers, septic systems, or into streams or waterways is not permitted.
 3. Immediately remove hazardous rubbish from project site.
 4. Recycle as much as feasible.
- B. Provide daily sweeping and clean-up of dust, debris, litter trash containers and other items required to maintain a clean, orderly and accessible site. Hauling of debris to legal dump or landfill is required weekly as a minimum.
- C. Waste concrete shall be removed from the site and legally disposed of by masonry and concrete installers.
- D. Construction Debris:
 1. Remove construction debris, as determined by the Owner's Representative, and dispose of off site. Replace with approved clean soils, in accordance with Section 02200, using materials appropriate to the location on the site and methods specified for fills and backfills.
 2. Construction debris includes, but is not limited to, waste concrete, spoils, debris and waste materials; areas used for cleaning tools, washing mixers and concrete trucks and areas containing oils, solvents, and similar liquids or their residues.

END OF SECTION

SECTION 1560
DUST CONTROL

PART 1 GENERAL

1.01 WORK

- A. Work included: the work under this section shall include all equipment, labor and materials necessary to control dust relating to or resulting from performance of the project work.
- B. Related work described elsewhere: In addition to the requirements described herein, comply with specific requirements for dust control as may be detailed in other sections of these specifications or as noted on the Drawings.

1.02 QUALITY ASSURANCE

- A. Standards: Comply with all pertinent requirements of Federal, State or Local agencies which may have jurisdiction over dust control procedures and additives used to aid in dust abatement.
- B. Inspection: The Project Engineer, Contractor and Owner shall periodically review the adequacy of dust control efforts and procedures to assure they are satisfactorily meeting the needs of the project.

1.03 SUBMITTALS

- A. Dust Control Procedures: Prior to commencing the project work, the Contractor shall meet with the Owner and Project Engineer to review the proposed dust control plan and methods to assure their compliance with the specific needs of the project.
- B. Additives: All Additives proposed for use as an aid in dust control other than Specified in Section 2.2 shall be reviewed with the Engineer prior to their application. Manufacturers literature along with recommended application rates shall be provided.

2.0 PRODUCTS

- 2.1 WATER:** Water used for dust control shall be non-polluted. The use of water from fire hydrants is not allowed.
- 2.2 CHEMICAL ADDITIVES:** Calcium Chloride: Shall conform to the requirements of AASHTO M 144 (ASTM-D-98) except that either pellet or flake shall be acceptable. Magnesium Chloride may also be used.

3.0 EXECUTION

- 3.1 GENERAL:** During the performance of the work required by these specifications or any operations appurtenant thereto, the Contractor shall furnish all labor, equipment, materials, and means required, and shall carry out proper and efficient measures wherever and as often as necessary to reduce the dust nuisance, and to prevent dust which has originated from his operations from damaging landscaping, dwellings, air quality or causing a nuisance to persons.

3.2 WATER

- A. Procurement: The Contractor shall be responsible for arranging for the necessary supply of suitable water for dust abatement.

- B. The Contractor shall apply water and/or water with additives on all access and haul roads, excavations, surfaces or filled trenches, stockpiles, waste areas, and other work areas as may be necessary to adequately control dust.
- C. Quantity: The quantity of water required for adequate dust control is variable and depends on climatic factors, soil types, and potential for nuisance. Dust control requirements shall be reviewed periodically during the course of project work.

3.3 WORK AREAS: The Contractor shall make a reasonable effort to keep work areas free of excessive dirt and mud, which may unnecessarily contribute, to a dust nuisance or adversely impact water quality.

3.4 CLEANING AND DISPOSAL: All equipment used for dust control shall be cleaned in a manner that is consistent with requirements to protect water quality. Any material resulting from cleaning dust control equipment shall be properly disposed.

END OF SECTION

SECTION 01565

EROSION CONTROL

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.

1.02 DESCRIPTION: This work consists of providing all necessary erosion control for the Project. The Contractor shall develop the methods for handling erosion control. Contractor shall obtain permits and approvals and have erosion control in place prior to the start of construction.

1.03 WORK INCLUDED

- A. This item of work shall consist of preparing an erosion and sediment control plan. The erosion and sediment control plan shall be prepared by the Contractor and submitted to the Project Engineer for review prior to initiating construction activities. As required contractor shall also obtain any required State of Colorado permits and submit a copy of the approved permit to the Project Engineer prior to start of construction.
- B. The elements required to implement the erosion and sediment control plan shall be in general conformance with details included in the Urban Drainage and Flood Control "Erosion Control Manual", the City of Steamboat Springs Construction Site Management Plan requirements, and the State of Colorado Storm Water Management Permit for Construction Sites requirements.
- C. The Contractor shall furnish, install, clean, and maintain all erosion control measures during construction and vegetation establishment, and remove and dispose of all temporary erosion control measures upon completion of revegetation and prior to contract close out unless otherwise approved by the Project Engineer.
- D. The Contractor shall clean off any soil, dirt, or debris tracked onto any adjacent streets. The Contractor shall clean the streets daily within 2 hours of notification given to the Contractor by the Project Engineer, or after 24 hours, the Project Engineer may arrange to have the streets cleaned and the related costs shall be deducted from the payments to the Contractor.
- E. Preparation of a dewatering / discharge plan for the Work. If required for the work, Contractor shall prepare a Dewatering plan for review and approval of the Project Engineer prior to undertaking the Work requiring dewatering / discharge permits. Contractor shall also obtain and implement any required State of Colorado dewatering permit including approval by the City Engineer, providing a copy of that permit to the Project Engineer prior to initiating dewatering activities.
- F. The Contractor shall assign to the project an employee to serve in the capacity of the Erosion Control Supervisor (ECS). The ECS shall be experienced in all aspects of construction and have satisfactorily completed an ECS training program authorized by the State of Colorado. Proof that this requirement has been met shall be submitted to the Project Engineer at least ten working days prior to the beginning of any construction work.
- G. The Contractor shall be responsible for installing and maintain all erosion and sedimentation control measures in accordance with all City, County, State, and Federal guidelines and regulations. The Contractor shall be responsible for maintaining appropriate documentation in accordance with all regulations.

- H. Copies of any state permits and the approved Erosion and Sediment Control plan shall be kept onsite at all times.

1.04 SUBMITTALS:

- A. Submit a copy of the site Erosion and Sediment Control Plan to the City of Steamboat Springs Construction Services Foreman for review and approval prior to start of construction
- B. Submit a copy of any required State of Colorado construction related permits (for example dewatering permits or Storm water management permit for construction sites) to the City of Steamboat Springs Construction Services Foreman prior to the start of construction.

PART 2 MATERIALS

2.01 GENERAL

- A. Erosion control materials used shall conform to the requirements of Section 209 of the Colorado Department of Transportation Standards and Specifications for Road and Bridge Construction, 2005.

PART 3 EXECUTION

3.01 GENERAL

- A. The erosion and sediment control features shall be installed prior to clearing and grubbing and shall remain in place throughout construction.
- B. It is the Contractor's responsibility to protect his work with adequate water control measures.
- C. Provide mud traps, rugs, or other features to prevent the tracking of dirt and mud into businesses and residences or on adjacent streets.
- D. Any fines incurred for failure to properly install or maintain adequate erosion control or offsite damage due to failure of erosion control shall be the sole responsibility of the Contractor.
- E. Contractor shall maintain on site at all times a copy of the current erosion control plan and storm water management plan.
- F. The erosion and Sedimentation Control Plan shall at a minimum include:
 - 1. Topographic Information – including sufficient detail to characterize the site
 - 2. Areas and extent of soil disturbance (show any phasing)
 - 3. Location of all on site and adjacent water bodies, wetlands, drainages, and storm water systems
 - 4. Location and type of proposed site controls including such items as diversion structures, check dams, silt fencing, straw wattles, sediment ponds, inlet protection, phasing to minimize disturbances, or other
 - 5. Vehicle soil tracking measures (vehicle track pad, vehicle wash station, etc.)
 - 6. Concrete washout areas and management methods.
 - 7. Identification of site personnel responsible for inspecting erosion control measures.

3.02 MAINTENANCE

- A. The Contractor shall remove sediment from upstream of sediment traps on an as needed basis prior to the sediment overcoming the device. Sediment removed shall be legally disposed of by the Contractor at no additional cost to Owner.
- B. The Contractor shall inspect all erosion control features on a weekly basis and after every storm event and shall provide maintenance and/or cleanup including removal of mud tracking on streets as necessary at no additional cost to owner.
- C. Contractor shall routinely update erosion control plan and erosion control measures to reflect current conditions.
- D. Contractor shall perform other maintenance activities as required by any applicable state or local permit. .

3.03 REMOVAL: All temporary erosion control materials shall be removed upon completion of the project.

PART 4 PRODUCTS (Not Applicable)

END OF SECTION

SECTION 01570

TRAFFIC CONTROL

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.
- B. Traffic Control Plan
- C. Manual on Uniform Traffic Control Devices, latest edition
- D. American Traffic Safety Services Association

1.02 DESCRIPTION: This work consists of managing traffic control for the Project including, furnishing, installing, moving, maintaining, and removing all temporary traffic control devices; construction, maintenance, and removing all detours; providing traffic control management and flaggers; and developing the required Methods of Handling Traffic, all in accordance with the Contract Documents, Contractor's Traffic Control Plan, Method of Handling Traffic, and as required by the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways.

1.03 GENERAL:

- A. Contractor shall submit Traffic Control Plan (TCP) and Methods of Handling Traffic (MHT) to the applicable regulating Agency for review and approval a minimum of seven (7) days prior to modifying any traffic control.
- B. Contractor shall obtain any necessary permits, such as an Obstruction Permit from the City or a Right of Way permit from Colorado Department of Transportation, prior to start of the phase of work requiring modifications to traffic in the right-of-way or public easements.
- C. Streets, public accesses, and local driveway access shall remain open at all times unless otherwise approved by the Owner and regulating agency as part of the TCP and MHT. Any special road closures that prohibit vehicular access along roadways shall be approved in advance by the Project Engineer and regulating agency so that detour routes or schedule modifications can be communicated to delivery personnel. Detours shall be properly signed and barricaded to keep both vehicular and pedestrian delivery traffic safe from the hazards of construction activity.
- D. The Contractor shall also provide and maintain in a safe condition, temporary approaches or crossings and intersections with streets, businesses, parking lots, residences, and garages. The streets and the intersections of the access points shall be maintained in a manner that will safely and adequately accommodate vehicle and pedestrian traffic.
- E. The Contractor shall not store materials or equipment nor park vehicles on the streets except in designated areas. The Contractor shall not have materials or equipment in the traffic lanes open to traffic at any time unless approved as part of the Construction Site Management Plan. Portions of the streets that are not included in the Work, but used as access routes for the Project shall be maintained by the Contractor. Snow removal within the work areas will be the responsibility of the Contractor. The Contractor shall be responsible for maintaining all work that is included in the Contract, and maintaining approaches, crossings, intersections, and other features as may be necessary to accommodate pedestrian and vehicle traffic without direct compensation, except as provided in the Contract Documents.

- F. Contractor shall control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and City operations.
 - G. The Contractor shall maintain adequate site conditions to allow emergency access to all buildings adjacent to construction at all times. An emergency access route plan shall be submitted to the Project Engineer and appropriate entities to the City of Steamboat Springs, dispatch (8711144), Public Works Department as well as Police, Ambulance, and Fire Departments and updated every time a change in access route occurs. These changes shall be provided at least 48 hours prior to their implementation.
 - H. All businesses shall remain accessible to pedestrian traffic and in conformance with ADA requirements at all times. Detours shall be properly signed and detour access routes shall be maintained to be free of trip hazards, comprised of appropriate surface treatment, and a minimum of 6 feet wide.
 - I. The Contractor shall assure that during non-working hours of the construction pedestrians and vehicles are prevented from entering the Project
- 1.04 MAINTAINING TRAFFIC: During construction the Contractor shall be responsible for maintaining pedestrian and vehicle traffic control items as long as construction operations interfere with pedestrian and vehicle traffic.
- 1.05 MAINTAINING TRAFFIC DURING SUSPENSION OF WORK:
- A. During all any suspensions of work ordered by the Owner's Representative, the Contractor shall open to vehicle and pedestrian traffic all or portions of the Project as directed. Prior to allowing traffic on the project, the Contractor shall prepare the street so that it will safely and adequately accommodate traffic. During holiday weekends and other days during the construction when work is not prosecuted, adequate temporary surfaces must be provided, but not paved.
 - B. During suspensions of work, the streets will be maintained by the City of Steamboat Springs. However, when the suspension is the result of a failure by the Contractor, all costs for maintenance of traffic during the suspension period shall be borne by the Contractor. When the suspension is lifted, the Contractor shall renew any work or replace materials lost or damaged on the project and shall remove, as directed, work or materials used during the suspension. The Contractor shall complete the project as though the prosecution of the work had been continuous and without interference. All additional work caused during the suspensions, for reasons beyond the Contractor's control, will be paid for as provided in the Contract Documents by Change Order.
- 1.06 SPECIAL MAINTENANCE DIRECTED BY THE OWNER'S REPRESENTATIVE: If the Owner's Representative directs special maintenance for the benefit of pedestrians and vehicle traffic, that is not included in the Contract, the Contractor will be paid in accordance with the Contract Documents by Change Order. The Owner's Representative will determine the work to be classed as special maintenance.
- 1.07 TRAFFIC CONTROL PLAN AND METHOD OF HANDLING TRAFFIC
- A. The Contractor shall control traffic in accordance with the Contractor's TCP, as provided in the Proposal Documents, or as amended prior to construction with agreement of the Project Engineer. To implement the TCP, the Contractor shall develop and submit a MHT for each different phase of construction which shows the Contractor's proposed construction phasing, proposed traffic control devices, and proposed flaggers consistent with the TCP. If at any time the Contractor desires to change the MHT, it shall be considered a different phase requiring a new MHT. The MHT shall be submitted to the Project Engineer and appropriate regulating agency for approval at least 14 days prior to any construction where traffic control is required.
 - B. Any major revision to the TCP as determined by the Project Engineer must be authorized by a change order. Each proposed MHT shall be approved in writing by the Project Engineer before the corresponding phase of construction will be allowed to begin. The MHT shall be submitted at the

- C. The proposed MHT shall include as a minimum the following:
1. A detailed diagram which shows the location of all traffic control devices, including advance construction signs and speed limit signs; method, length and time duration for lane closures; and location of flaggers and time duration of the flagging operation. Lane closures shall be kept to a minimum in both length and duration, and cause a minimum of interference to the traveling public, consistent with the work being performed.
 2. A tabulation of all traffic control devices shown in the detailed diagram. Traffic control devices may be used for more than one operation or phase. However, all devices required for any particular phase must be detailed and tabulated for each phase.
 3. The Contractor shall furnish supporting references from documents such as the MUTCD, for any devices incorporated into the MHT which are not included in the TCP provided in the Contractor's proposal.
 4. An access maintenance plan for all properties requiring access during construction. This plan shall also indicate the areas where equipment will be stored, vehicles parked, and construction signs and materials stored, if within the project site. This plan shall show all access for businesses, the suppliers for businesses, trash collection, and resident and guest vehicular access.
 5. A plan for maintaining and controlling pedestrian, bicycle and other non-vehicular traffic. This plan shall include all proposed pedestrian signing language, sign designs, and locations of signs. Pedestrian detours shall be clearly shown on the diagram above and details of barricades shall be shown. Sufficient flaggers shall be provided to control Contractor vehicles, private vehicles, and pedestrians.
 6. All proposed street closures and the justification for such closures.
 7. A plan for emergency vehicle access.
 8. A plan for coordinating with other contractors working in the vicinity.
 9. The Contractor shall secure written permission from property owners for any detours on private property.

1.08 TRAFFIC CONTROL SUPERVISOR

- A. The Contractor shall designate an individual, other than the superintendent, to be the traffic control supervisor. The traffic control supervisor shall be certified as a worksite traffic supervisor by either the American Traffic Safety Services Association (ATSSA) or the Colorado Contractors Association (CCA), and shall have a current Colorado flagger's certificate. A copy of the traffic control supervisor's certifications shall be provided to the Owner's Representative at the preconstruction conference.
- B. Traffic control management shall be provided by a certified traffic control supervisor on a 24-hour-per-day basis. The traffic control supervisor or another representative who is certified as a work site traffic supervisor shall be available and reasonably accessible to the job site on every working day, on call at all times, and available upon the Project Engineer's request at other than normal working hours. During non-working hours of the construction, the traffic control supervisor or another representative who is certified as a work site traffic control supervisor shall respond to the job site within 45 minutes. The Contractor shall maintain a 24-hour telephone number at which the traffic control supervisor can be contacted. The traffic control supervisor shall not act as a flagger except in an emergency or in relief for short periods of time.

C. The traffic control supervisor's duties shall include:

1. Preparing, revising, and implementing each required method of handling traffic in accordance with the traffic control plan.
2. Directly supervising project flaggers.
3. Coordinating all traffic control operations for the Project at the Project Site including those of the Contractor, its subcontractors and suppliers.
4. Coordinating all traffic control operations for the Project at the Project Site for pedestrians and businesses.
5. Coordinating with other contractors from adjacent active projects to assure smooth traffic control operations for all construction projects.
6. Coordinating project activities with appropriate emergency service agencies, local businesses, business suppliers, special events coordinator, and relevant departments of the City of Steamboat Springs and homeowner associations.
7. Preparing a traffic control diary on every calendar day traffic control devices are in use. The diary at a minimum shall include, date; time of inspections; actions taken, issues noticed, and issues resolved; significant encounters with the public; description of traffic control operations (lane closures, shoulder closures, pilot car operations, detours, etc.) including location, setup and takedown time, and approved MHT number; types and quantities of traffic control devices used per approved MHT; list of flaggers used, including start time, stop time, and number of flagging hours used; and traffic control problems (traffic accidents; damaged, missing or dirty devices, etc.) and corrective action taken. This diary shall be submitted to the Project Engineer daily and become a part of the City's project records.
8. Inspecting traffic control devices on every calendar day that traffic control devices are in use, masked, or turned away from traffic. These inspections shall include at least one night inspection per week and once per day when construction operations are idle (weekends, holidays, non-construction days). These inspections shall be performed by the traffic control supervisor or another representative who is a certified as a work site traffic supervisor.
9. Insuring that traffic control devices are functioning as required.
10. Overseeing all requirements covered by the Contract which contribute to the convenience, safety and orderly movement of traffic. Have an up-to-date copy of the MUTCD and applicable standards and specifications available at all times on the project.
11. Attending all project scheduling, coordination, and weekly community meetings.
12. Supervising the cleaning and maintenance of all traffic control devices.

1.09 FLAGGING

- A. Flaggers, experienced in flagging operations, shall be provided in the numbers and locations as designated in the MHT. Flagging shall be performed as described in the latest edition of the MUTCD. Flaggers shall have a current Colorado flagger's certificate. A copy of the traffic flagger's certifications shall be provided to the Owner's Representative at the Preconstruction Conference. All traffic control personnel's apparel shall include at a minimum a shirt or jacket, hard hat, and reflective vest. Flaggers must be familiar with current construction operations and be able to direct pedestrians, bicyclists, and vehicles towards their intended destinations. Flaggers must have the disposition to fit as public relations persons with good communication skills to address the pedestrians and vehicles in the project area.

- B. Night time flagging stations shall be illuminated with flood lights unless otherwise approved. Lighting will not be paid for separately.
- C. The Contractor shall provide all flagging through the project necessary to assure proper safety to pedestrian and vehicle traffic. All flagging personnel shall have completed the minimum training requirements for flaggers within two years prior to starting work on the project.
- D. Flaggers shall have with them at all times, in sufficient quantity, any newsletters, brochures, or the like which are used for disseminating project or traffic control information to the public.
- E. The authorized duties of flaggers consist of directing pedestrians, the traveling public, loading and delivery vehicles for businesses, resetting, cleaning, maintaining, adjusting, and removing traffic control devices and temporary walkways, and the construction traffic that affects the traveling public within the project limits.

1.10 TRAFFIC CONTROL DEVICES

- A. Traffic Control Devices includes the equipment and material cost of constructing, maintaining, cleaning, relocating, and removing all pedestrian detours, including signing, barricades and all traffic control devices. Traffic Control Devices also includes all specialized / custom wayfinding and directional signage for pedestrian traffic control, vehicular traffic control, and specific business locations. This item includes preparation of the MHT's required by the Contract Documents and other traffic control functions not specifically paid for separately in the Contract Documents.
- B. All traffic control devices shall be provided with all components necessary to comprise a complete installation. Any portable device that requires weight to prevent overturning shall be weighted with appropriate sized sand bags. Traffic control devices that are damaged, weathered, worn, or otherwise determined to be unacceptable, shall be replaced at the Contractor's expense.
- C. Portable construction traffic signs shall be removed when not required. Permanently mounted construction traffic signs shall be masked or turned away from traffic when not required. During No Construction Activity periods or when the work is suspended, and there is no condition requiring traffic control devices or construction traffic signs, all of the construction traffic signs shall be masked or turned away from traffic. If this condition is to exist for more than 30 days, all construction traffic signs shall be removed.
- D. When a device is not in use, the Contractor may remove it from the project for the period it is not needed. Devices temporarily not in use shall, as a minimum, be removed from the project area. Moving will include devices removed from the project and later returned to use. This work also includes traffic control management, flagging and pilot car operation.
- E. Vehicle Traffic: Vehicle traffic signing and barricade materials shall conform to the applicable portions of the MUTCD, the Traffic Control Plan, and the Method of Handling Traffic. Signing shall be sufficient to direct vehicles to the appropriate location. Barricades shall be suitable to prevent vehicles from entering the Project unintentionally.
- F. Pedestrian Traffic: Pedestrian traffic signing and barricade materials shall conform to the applicable portions of the MUTCD, the Traffic Control Plan, the Method of Handling Traffic, and be of a style that fits with the character of the project area. Signing shall be sufficient to direct pedestrians to the appropriate locations. Detours shall be sufficiently signed so that pedestrians can always see directional signing to guide them through the detour area. Barricades shall be suitable to prevent pedestrians from entering the Project unintentionally. Barricades shall be of wood or similar construction to restrict access by pedestrians. Plastic fencing is not acceptable for barricades.
- G. Bicycle Traffic: Bicycle traffic signing shall be provided where not already addressed by vehicle or pedestrian signing or where required on bicycle specific facilities, such as a bicycle lane.

PART 2- PRODUCTS (Not Applicable)

PART 3– EXECUTION

- 3.01 Contractor shall provide temporary walkways and ramps that are constructed of wood, asphalt, or other reasonable material, detours, and signing to provide safe access to businesses and residences during construction. Walkways shall be a minimum of 6 feet in width. All facilities for use by the general public shall be in accordance with applicable safety standards.
- 3.02 All temporary pedestrian access and walkways shall conform to ADA requirements.
- 3.03 Temporary lighting shall be provided where enclosed walkways are required.

END OF SECTION

SECTION 01600

MATERIALS AND EQUIPMENT

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

- A. The General Contract Conditions, Drawings and other Division-1 Specification sections apply to this section.

1.02 DESCRIPTION: This section includes administrative and procedural requirements governing the Contractor's selection of products for use in the project.

1.03 DEFINITIONS: Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self-explanatory and have well-recognized meanings in the construction industry.

- A. Products: Are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "Product" includes the terms "material", "equipment", "system" and terms of similar intent.
- B. Named Products: Are items identified by manufacturer's product name, including make or model designation, indicated in the manufacturers published product literature that is current as of the date of the Contract Documents.
- C. Materials: Are products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
- D. Equipment: Is a product with operational parts, whether motorized or manually operated, that requires service connections such as wiring or piping.

1.04 SUBMITTALS:

- A. Refer to Section 01300 1.06

1.05 QUALITY ASSURANCE:

- A. Source Limitations: To the fullest extent possible, provide products of the same kind from a single source. When specified products are available only from sources that do not, or cannot, produce a quantity adequate to complete project requirements in a timely manner, consult with the Owner's Representative to determine the most important product qualities before proceeding. Qualities may include attributes, such as visual appearance, strength, durability, or compatibility. When a determination has been made, select products from sources producing products that possess these qualities, to the fullest extent possible.
- B. Foreign Product Limitations: Except under one or more of the following conditions, provide domestic products, not foreign products, for inclusion in the Work:
 - 1. No available domestic product complies with the Contract Documents.

2. Domestic products that comply with the Contract Documents are available only at prices or terms substantially higher than foreign products that comply with the Contract Documents.
3. Nameplates: Except for required labels and operating data, do not attach or imprint manufacturer's or producer's nameplates or trademarks on surfaces of products that will be exposed to view in occupied spaces or on the exterior.
4. Labels: Locate required product labels and stamps on concealed surfaces or, where required for observation after installation, on accessible surfaces that are not conspicuous.
5. Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated equipment. Locate on an easily accessible surface that is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
 - a) Name of product and manufacturer.
 - b) Model and serial number.
 - c) Capacity.
 - d) Speed.
 - e) Ratings.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft.
 1. Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
 2. Coordinate delivery with installation time to assure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 3. Deliver products to the site in an undamaged condition in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 5. Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.
 6. Store products subject to damage by the elements above ground, under cover in a weather tight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.
 7. Provide products complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and the intended use and effect.

- B. Properly carton, crate, cover and protect materials, products and equipment for shipping, handling and storing. Use appropriate means for hoisting and loading which will prevent damage or overstress to items being handled or shipped. Store them under roof in controlled environment whenever feasible; otherwise store off the ground under suitable coverings properly secured against wind and weather. Protect all items from rain, snow moisture, wind, cold, heat, frost, sun, staining, discoloration, deterioration and physical damage from any cause. Refer to individual sections for specific requirements.

1.07 GENERAL PRODUCT REQUIREMENTS:

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, new at the time of installation.
- B. Standard Products: Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- C. It is the responsibility of the Contractor and his Installers, as experts, to notify the Owner's Representative of any specified product that to his knowledge will not meet the requirements or is unsuited to the application indicated or specified.
- D. The use of manufacturer's and trade names is intended only to establish standards of quality and performance and not to limit competition.
- E. Substitution of Materials and Equipment: All bids are to be based on those materials and equipment specified in the Contract Documents. The Owner's Representative will be the sole judge of the acceptability of substitute materials and equipment and may accept or reject such substitutes at any time. Requests for review of substitute items of material and equipment will not be accepted by Owner's Representative from anyone other than Contractor. If Contractor wishes to furnish or use a substitute item of material or equipment Contractor shall make written application to Owner's Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equal substance to that specified and be suited to the same use and capable of performing the same function as that specified. The Application shall state whether or not acceptance of the substitute for use in the Work will require a change in the Drawings or Specifications to adapt the design to the substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the Application and available maintenance, repair and replacement service will be indicated. The Application shall also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by Engineer in evaluating the proposed substitute. Owner's Representative will be the sole judge of acceptability, and no substitute will be ordered or installed without Owner's Representative prior written acceptance. Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other Surety with respect to any substitute. Owner's Representative will record time required by Owner's Representative and consultants in evaluating substitutions proposed by Contractor and in making changes in the Drawings or Specifications occasioned thereby. Whether or not Owner's Representative accepts a proposed substitute, Contractor shall reimburse Owner for the charges of Owner's Representative and consultants for evaluating any proposed substitute.
- F. The source of supply of each of the materials required shall be reviewed and accepted by the Owner's Representative before delivery is started. Representative preliminary samples of the character and quality specified may be submitted by the Contractor or producer for examination and testing. The

- results obtained from testing such samples may be used for preliminary review but will not be used as a final acceptance of the materials. All materials proposed to be used may be inspected or tested at any time during their preparation and use. If, after testing, it is found that sources of supply which have been reviewed and accepted do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish acceptable material from other sources acceptable to Engineer.
- G. Samples of all materials for test upon which are to be based the acceptance or rejection shall be taken by the Owner's Representative at the discretion of the Owner's Representative. Materials may be sampled either prior to shipment or after being received at the place of construction. All sampling, inspection, and testing shall be done in accordance with the methods hereinafter prescribed. The Contractor shall provide such facilities as the Owner's Representative may require for conducting field tests and for collecting and forwarding samples. The Contractor shall not use or incorporate into the Work any materials represented by the samples until tests have been made and the material found to be acceptable. Only materials conforming to the requirements of these specifications and which have been accepted by the Owner's Representative shall be used in the Work. Any material, which, after acceptance, has for any reason become unfit for use shall not be incorporated into the Work
- H. Except as otherwise provided herein, sampling and testing of all materials and the laboratory methods and testing equipment required under these Specifications, shall be in accordance with the most current edition of the standards set forth in Technical Specifications. The testing of all samples shall be done at the expense of the Contractor at an independent laboratory accepted by the Owner's Representative. Laboratory sieves shall have square openings of the sizes specified. The Contractor shall furnish the required samples without charge. All samples have been checked and stamped with the approval of the Contractor, identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended. The Contractor shall give sufficient notification to the Engineer of the placing of orders for materials to permit testing.
- I. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier or distributor, except as otherwise provided in the Contract Documents.
- J. Materials shall be stored so as to insure the preservation of their quality and fitness for the Work. When considered necessary by the Engineer, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and shall be placed under cover or otherwise protected when requested by the Engineer. Stored materials shall be located so as to facilitate prompt inspection. Contractor is responsible for the safety of any of its materials, tools, possessions, and rented items stored on the job site, and for protection of the project and shall hold Owner and Owner's authorized representative harmless for any damages or loss incurred thereto.
- K. No material, equipment, tools, supplies, or instruments other than those belonging to or leased by Contractor will be removed from the project site by Contractor without the prior written approval of Owner.
- L. All materials not conforming to the requirements of these Specifications shall be considered defective. Whether in place or not, such material shall be removed immediately from the site of the Work, unless otherwise permitted by the Engineer. No rejected material, the defects of which have been subsequently corrected, shall be used until approval has been given. Upon failure of the Contractor to comply promptly with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to remove defective materials and to deduct the cost of removal and replacement with specified materials from any moneys due or to become due the Contractor.

PART 2 PRODUCTS

- 2.01 Product Selection Procedures: The Contract Documents and governing regulations govern product selection. Procedure governing product selection includes the following:
- A. Proprietary Specification Requirements: Where Specifications name only a single product or manufacturer, provide the product indicated. No substitutions will be permitted.
 - B. Semi proprietary Specification Requirements:
 - 1. Where Specifications name two or more products or manufacturers, provide one of the products indicated. No substitutions will be permitted.
 - 2. Where Specifications specify products or manufacturers by name, accompanied by the term "or equal" or "or approved equal," comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product. (Note: Bids shall be based upon specified products, not substitutions.
 - C. Nonproprietary Specifications: When Specifications list products or manufacturers that are available and may be incorporated in the work, but do not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
 - D. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.
 - E. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements and are recommended by the manufacturer for the application indicated. Manufacturer's recommendations may be contained in published product literature or by the manufacturer's certification of performance.
 - F. Compliance with Standards, Codes and Regulations: Where Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standards, codes, or regulations specified.
 - G. Visual Matching:
 - 1. Where Specifications require matching an established Sample, the Owner's Representative's decision will be final on whether a proposed product matches satisfactorily.
 - 2. Where no product available within the specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents concerning "substitutions" for selection of a matching product in another product category.
 - H. Visual Selection: Where specified product requirements include the phrase "...as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Owner's Representative will select the color, pattern, and texture from the product line selected.

PART 3 EXECUTION

3.01 **INSTALLATION OF PRODUCTS:** Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other work. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

3.02 **MOCK-UPS:** The Contractor shall provide mock-ups of key features for review and approval by the Owner's Representative prior to construction of the feature. Features requiring mock-up will be identified in the Contract Documents.

END OF SECTION

SECTION 01705

CUTTING AND PATCHING

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. The General Contract Conditions, Drawings and other Division - 1 Specification sections apply to Work of this section.

1.02 DESCRIPTION

- A. Work Included: Cutting, fitting and patching including related excavation and backfill, pavers, asphalt, concrete, streetscape and features, required to complete the work or to:
 1. Make its parts fit together properly.
 2. Uncover portion of the work to provide for installation of ill-timed work.
 3. Remove and replace defective work.
 4. Remove and replace work not conforming to requirements of Contract Documents.
 5. Remove samples of installed work as specified for testing.
 6. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

1.03 RELATED WORK

- A. Division 2 - Sitework.

1.04 QUALITY ASSURANCE

- A. Notification of Owner's Representative: Notify Owner's Representative 48 hours in advance of executing any cutting or alteration which affects:
 7. The work of the City or any separate contractor.
 8. The structural value or integrity of any element of the project.
 9. The integrity of effectiveness of weather-exposed or moisture resistant elements or systems.
 10. The efficiency, operational life, maintenance or safety of operational elements.

1.05 MATERIALS: Comply with specifications and standards for each specific product involved.

PART 2 EXECUTION

2.01 INSPECTION

- A. Inspect existing conditions of the project, including elements subject to damage or to movement during cutting and patching.
- B. After uncovering work, inspect conditions affecting installation of products or performance of work. Report unsatisfactory or questionable conditions to Owner's Representative. Do not proceed with work until Owner's Representative has provided further instructions.

2.02 PREPARATION: Provide adequate temporary support as necessary to assure the structural value and integrity of the affected portion of the work. Provide devices and methods to protect other portions of the project from damage. Provide protection from elements for the portion of the project which may be exposed by cutting and patching work, and maintain excavations free from water.

2.03 CUTTING AND PATCHING

- A. General: Openings in construction which are required by other contractors shall be left by crafts involved. It is the responsibility of applicable contractors to supply in advance, proper and sufficiently detailed information. All cutting as may be required shall be done only after concurrence of Owner's Representative and at expense of negligent party. All cutting and patching shall be performed as shown in the patching detail found in the plans.
- B. The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.
- C. The Contractors shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.
- D. Cutting:
 - 1. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation or repairs.
 - 2. Execute excavating and backfilling, pavers and concrete, streetscape and features by methods which will prevent settlement or damage to other work or property.
 - 3. Employ the original installer or fabricator to perform cutting and patching for:
 - a) Weather-exposed or moisture-resistant elements.
 - b) Sight-exposed finished surfaces.
 - 4. Cut asphalt, concrete or masonry using a masonry saw or core drill as applicable. Pneumatic tools will not be allowed unless accepted by Owner's Representative. A wet saw is to be used on all cuts exceeding 25 linear feet.

- E. Fitting: Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- F. Finishing: Where surfaces are exposed, finish with materials specified in finish schedule or materials that are on constructed surfaces. Work shall be accomplished by trades skilled in finish trade. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish the entire unit.

END OF SECTION

**SECTION 01770
CONTRACT CLOSEOUT**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Contract Conditions, Drawings and other Division - 1 Specification sections apply to Work of this section.

1.02 DESCRIPTION: This Section includes:

- A. Administrative and procedural requirements for project closeout, including but not limited to:
 - 1. Inspection procedures and Walk thru.
 - 2. Submittal of warranties, maintenance manuals, and record drawings.
 - 3. Specific requirements for individual units of work are specified in those specification sections that relate to the work.
- B. Contractor's responsibility is to complete the project in accordance with the Contract Documents and to enforce their requirements on his employees, suppliers and Subcontractors.
- C. Cleaning Up
 - 4. The Contractor shall keep the Project Site and surrounding area free from accumulation of waste materials or rubbish caused by the Contractor's operations. At completion of the construction, the Contractor shall remove from and about the Project Site all Work related materials, equipment, machinery, tools, waste, and rubbish.
 - 5. If the Contractor fails to clean up the Project Site, the Owner may do so and the cost will be charged to the Contractor.

1.03 SUBSTANTIAL COMPLETION:

- A. Refer to 01025 Measurement and Payment of the General Conditions for procedures regarding Substantial Completion.

1.04 FINAL ACCEPTANCE:

- A. Refer to 01025 Measurement and Payment of the General Conditions for procedures regarding Final Completion and Acceptance of the Work.

1.05 FINAL WALK THRU

- A. Contractor shall arrange for a walk-through of all Work with Owner's designated representatives and staff to identify all components of the Work requiring operation and maintenance. The walk-through shall be scheduled by the Contractor at least 14 days in advance with the Owner's Representative and Project Engineer. The walk-through shall be video taped by the Contractor and provided to the Owner.
- B. The Contractor shall provide appropriate training for the Owner's designated staff for all components of the Work requiring operation and maintenance. Training shall be as recommended by the manufacturers or suppliers of the components of the Work. The training

PART 2- PRODUCTS

2.01 CLOSEOUT DOCUMENTS: In order to complete the Project, provide the following documents:

- A. Printed Warranties as specified in the appropriate Sections.
- B. Parts and Maintenance materials as specified in the appropriate Sections.
- C. Project record drawings shall be provided in CADD format acceptable to the Owner's Representative and also provide a reproducible hard copy.
- D. As-built final survey of the all utility improvements and the City's storm sewer, irrigation, and electrical systems.
- E. Operating and maintenance data and training information / videos as required by section 01770.
- F. Utility As-built Documents : Provide complete As-built drawings to utility companies in accordance with each utility provider's requirements and to City in accordance with City standards.

PART 3 - EXECUTION

3.01 PREPARATION OF DOCUMENTS:

- A. A. General: Store record documents apart from documents used for construction and maintain documents in clean, dry, legible condition. Do not use record documents for construction purposes. Label each document "PROJECT RECORD" in one inch or larger printed letters. Make documents available at all times for inspection by the Owner's Representative and Project Engineer.
- B. Record Documents:
 - 1. Maintain a clean, undamaged set of blue or black line prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 - 2. During construction, mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
 - 3. Mark new information that is important to the Owner's Representative, but was not shown on Contract Drawings or Shop Drawings.
 - 4. Keep Record Documents current. Update at least weekly. Do not permanently conceal any work, until required information has been recorded.
 - 5. Horizontal and vertical location of all underground utilities and appurtenances, including storm sewer, referenced to permanent surface improvements.

6. Abandoned utilities may exist, contractor to field locate and coordinate with utility provider. Locations shall be provided on Record Documents.
7. Horizontal and vertical locations of underground irrigation and electrical sleeving referenced to permanent surface improvements. Provide the locations of both ends identified with locatable discs in the field. Information to be furnished on a reproducible mylar drawing with a field log of all survey data.
8. Location of clean-outs and other items requiring access or maintenance.
9. At the completion of the project, supply a digital computer file of the record drawings and one hard copy to the Owner's Representative. The Owner's Representative will supply the contractor with a file of the drawings prior to beginning work.
10. Maintain on site, separate from documents used for construction, one complete set of Contract Documents as Record Documents. Keep documents current. Include all Change Orders, correspondence, and reports.

END OF SECTION

**SECTION 01785
WARRANTIES**

PART 1 - GENERAL

- 1.01 RELATED DOCUMENTS : The General Contract Conditions, Drawings and other Division - 1 Specification sections apply to Work of this section.
- 1.02 DESCRIPTION: Section includes general administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties. This section does not include warranties that may be required by the Engineering Standards or City Code for public infrastructure. Additional warranty measures may apply to meet standards or City code.
- 1.03 RELATED SECTIONS:
- A. Refer to the Construction Contract and Contract Documents for terms of the Contractor's special warranty of workmanship and materials.
 - B. General closeout requirements: Section 01770.
 - C. Specific requirements for warranties for work, products and installations: Individual Sections in Divisions 2.
 - D. Certifications and other commitments and agreements for continuing services to the Owner: Applicable portions of Contract Documents.
- 1.04 DEFINITIONS:
- A. Standard Product Warranties: Pre-printed written warranties published by individual manufacturers for particular products and specifically endorsed by the manufacturer to the Owner.
 - B. Special Warranties: Written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.
- 1.05 WARRANTY REQUIREMENTS:
- A. The Contractor warrants to the Owner that materials and equipment furnished under this Contract are of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work conforms to the Contract Documents. Work not conforming to these requirements, including substitutions not authorized, may be considered defective.
 - B. Written warranties from manufacturers and suppliers for all material and equipment shall include the City of Steamboat Springs as the Owner of said material or equipment.
 - C. Related Damages and Losses: When correcting warranted work that has failed, remove and replace other work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted work.
 - D. Reinstatement of Warranty: When work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty.
 - E. Replacement Cost: Upon determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective

- F. Warranties for mechanical and electrical system shall have the industry standard, or better, time frame.
 - G. Warranty shall be provided on all other Work for a period of no less than one year.
 - H. Warranties shall commence at substantial completion or upon partial acceptance.
 - I. Owner's Recourse:
 - 1. Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 2. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
 - 3. The Owner reserves the right to refuse to accept work for the Project where a special warranty, certification, or similar commitment is required on such work or part of the work, until evidence is presented that entities required to countersign such commitments are willing to do so.
 - 4. In the event that the contractor should fail to make such repairs, adjustments or other work that may be made necessary by such defects, the owner may do so and charge the contractor the cost thereby incurred.
 - J. Where a performance bond is required, the performance bond shall remain in full force and effect through the guarantee period.
 - K. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the work that incorporates the products, nor does it relieve suppliers, manufacturers, and Subcontractors required to countersign special warranties with the Contractor.
- 1.06 SUBMITTALS:
- A. Submit written warranties to the Owner's Representative prior to Final Acceptance.
 - B. When a special warranty is required to be executed by the Contractor, or the Contractor and a Subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner's Representative for approval prior to final execution.
 - C. Refer to individual specification sections for specific content requirements, and particular requirements for submittal of special warranties.
 - D. Form of Submittal: At Final Completion, compile each required warranty and bond properly executed by the Contractor, or by the Contractor, Subcontractor, supplier or manufacturer. Include the warranty documents in the project operating and maintenance manuals.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION